

### APPENDICES

### PART 3

### Ordinary Council Meeting

To Be Held

Wednesday, 24 June 2020 Commencing at 5.00pm

At

Shire of Dardanup ADMINISTRATION CENTRE EATON 1 Council Drive - EATON

> This document is available in alternative formats such as: ~ Large Print ~ Electronic Format [disk or emailed] Upon request.

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LUNTEER BUSH FIRE BRIGADE - CURRENT SITE REDEVELOPMENT         WESTERN HIGHWAY, WATERLOO         WESTERN HIGHWAY, WATERLOO         WESTERN HIGHWAY, WATERLOO         MESTERN HIGHWAY, WATERLOO         SCOFE         SCOFE         SCOFE         New vehicle shed, meetings/operations room, office, comms, stores, texten and 2 x UAT facilities.         Concrete hardshard to the front of new vehicle shed.         Concrete hardshard to the front of new vehicle shed.         Existing setit system to be upgraded.         INDICATIVE COST		DRMATION SHEET EL CONCEPT	Shire of Dardanu
RLOO RCOPE Concrete hardsting VBFB shed and associated buildings. New vehicle shed, meetings/operations room, office, comms, kitchen and 2 x UAT facilities. Concrete hardstand to the front of new vehicle shed. Resurface existing car park and entry area. Resurface existing car park and entry area. Existing water tank to be re-used. Existing water tank to be re-used. Existing water tank to be re-used. DIDICATIVE COST COTAL BUILDING AREA - 248.85 sqn S15,000 Coffice/ Meeting room/ Comms - 40.70 sqm S15,000 Met Areas - 15.00 sqm S15,000 Power connection S16 System Upgrade S15,000 Contingercy S15,000 Contingercy S15,000 Contingercy S15,000 Contingercy S15,000 Contingercy S15,000 Contingercy S15,000 CONTINGER COST Contingercy S15,000 CONTINGER COST Contingercy S15,000 CONTINGER COST Contingercy S15,000 CONTINGER COST Contingercy S15,000 CONTINGER COST CONTINGER COST CONTIN	LUNTEER BUSH FIRE BR	<b>IGADE - CURRENT SITE REDE</b>	/ELOPMENT
<ul> <li>Demolish existing VBFB shed and associated buildings.</li> <li>New vehicle shed, meetings/operations room, office, comms, kitchen and 2 x UAT facilities.</li> <li>Concrete hardstand to the front of new vehicle shed.</li> <li>Resurface existing car park and entry area.</li> <li>Existing septic system to be upgraded.</li> <li>Existing water tank to be re-used.</li> <li>Existing water tank to be re-used.</li> <li>INDICATIVE COST</li> <li>IOTAL BUILDING AREA</li> <li>Vehicle Shed - 102.15 sqm</li> <li>Strons</li> <li>Stores - 35.35 sqm</li> <li>Stores</li></ul>	WESTERN HIGHWAY, WATERLOO	SCOPE	
<ul> <li>Concrete hardstand to the front of new vehicle she</li> <li>Resurface existing car park and entry area.</li> <li>Existing septic system to be upgraded.</li> <li>Existing water tank to be re-used.</li> <li>Existing water tank to be re-used.</li> <li>INDICATIVE COST</li> <li>INDICATIVE COST</li> <li>Office/ Meeting room/ Comms - 40.70 sqm</li> <li>Kitchen - 10.00 sqm</li> <li>Stores - 35.35 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Site preparation &amp; Earthworks</li> <li>Septic System Upgrade</li> <li>Demolition</li> <li>Contingency</li> <li>APPROXIMATE TOTAL COST -</li> </ul>		noli v vé hen	mms,
<ul> <li>Resurface existing car park and entry area.</li> <li>Existing septic system to be upgraded.</li> <li>Existing water tank to be re-used.</li> <li>Existing water tank to be re-used.</li> <li>INDICATIVE COST</li> <li>INDICATIVE</li> <li>INDICATIVE COST</li> </ul>		oncrei	
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<ul> <li>TOTAL BUILDING AREA -</li> <li>Vehicle Shed - 102.15 sqm</li> <li>Vehicle Shed - 102.15 sqm</li> <li>Office/ Meeting room/ Comms - 40.70 sqm</li> <li>Kitchen - 10.00 sqm</li> <li>Stores - 35.35 sqm</li> <li>Stores - 35.35 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Power connection</li> <li>Power connection</li> <li>Power connection</li> <li>Steparation &amp; Earthworks</li> <li>Septic System Upgrade</li> <li>Demolition</li> <li>APPROXIMATE TOTAL COST -</li> </ul>		$\cap$	
<ul> <li>Vehicle Shed - 102.15 sqm</li> <li>Office/ Meeting room/ Comms - 40.70 sqm</li> <li>Kitchen - 10.00 sqm</li> <li>Kitchen - 10.00 sqm</li> <li>Stores - 35.35 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Tower connection</li> <li>Power connection</li> <li>Site preparation &amp; Earthworks</li> <li>Site preparation &amp; Earthworks</li> <li>Septic System Upgrade</li> <li>Demolition</li> <li>APPROXIMATE TOTAL COST -</li> </ul>	21925	TOTAL BUILDING AREA -	248.85 sqm
<ul> <li>Office/ Meeting room/ Comms - 40.70 sqm</li> <li>Kitchen - 10.00 sqm</li> <li>Stores - 35.35 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Site preparation &amp; Earthworks</li> <li>Septic System Upgrade</li> <li>Demolition</li> <li>Contingency</li> <li>APPROXIMATE TOTAL COST -</li> </ul>		Vehicle	\$150,000
<ul> <li>Kitchen - 10.00 sqm</li> <li>Stores - 35.35 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Wet Areas - 29.50 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Power connection</li> <li>Power connection</li> <li>Site preparation &amp; Earthworks</li> <li>Septic System Upgrade</li> <li>Demolition</li> <li>Contingency</li> <li>APPROXIMATE TOTAL COST -</li> </ul>		e/ N	\$60,000
<ul> <li>Stores - 35.35 sqm</li> <li>Wet Areas - 15.00 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Power connection</li> <li>Power connection</li> <li>Site preparation &amp; Earthworks</li> <li>Site preparation &amp; Earthworks</li> <li>Septic System Upgrade</li> <li>Demolition</li> <li>Contingency</li> <li>APPROXIMATE TOTAL COST -</li> </ul>	TORE 16.45m <sup>2</sup>		\$17,500
<ul> <li>Wet Areas - 15.00 sqm</li> <li>Circulation Areas - 29.50 sqm</li> <li>Power connection</li> <li>Power connection</li> <li>Site preparation &amp; Earthworks</li> <li>Site preparation &amp; Earthworks</li> <li>Septic System Upgrade</li> <li>Demolition</li> <li>Contingency</li> <li>APPROXIMATE TOTAL COST -</li> </ul>		es -	\$37,100
irculation Areas - 29.50 sqm ower connection ite preparation & Earthworks eptic System Upgrade emolition ontingency PPROXIMATE TOTAL COST -	VEHICLE SHED	Are	\$26,300
ower connection ite preparation & Earthworks eptic System Upgrade emolition ontingency PPROXIMATE TOTAL COST -		ulati	\$49,000
ite preparation & Earthworks eptic System Upgrade emolition ontingency PPROXIMATE TOTAL COST -	HEN STORE	wer o	\$5,000
tic System Upgrade nolition tingency ROXIMATE TOTAL COST -		ite pre	\$15,000
nolition htingency PROXIMATE TOTAL COST -		tic S	\$15,000
Igency OXIMATE TOTAL COST -	12225	noliti	\$15,000
		Ŋ	\$39,000
	PT LAYOUT		\$428,900

### CONCEP KITCHEN 10.0m<sup>2</sup> OFFICE 6.65m<sup>2</sup> STORE 6.70m<sup>2</sup> LOCATION PLAN - SOUTH V WATERLOO VOI 2560 2560 = -1500 1500 9700 UAT 0.10m<sup>3</sup> MEETING/ OPERATIONS COMMS 10.50m² 5000 UAT 8.90m<sup>2</sup> 2275 + 1200 + 5620 - + ... 5000 -**+**--3900 --• 0174 11320

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Hall and associated buildings.

sting toilet facilities via covered link between buildings.

hicle shed, office / training room and covered link.

system to be removed and new system installed.

access road to be modified / upgraded for use

duty vehicles.

ardstand to entry area of vehicle shed.

nk as required by DFES.

INDICATIVE COST 3UILDING AREA -	160.90 sqm
100.30 sqm	
n - 17.50sam	
- 12 50 sam	
- 21.25 sqm	\$60,000
dahs - 115.40 sqm	
ed Area - 61.50 sqm	
ore - 39.80 sqm PARTITION	\$15,000
g Area - 29.40 sqm	\$66,000
121.90 sqm	\$150,000
9.60 sqm	\$10,000
tion	\$5,000
n & Earthworks	\$20,000
stem	\$15,000
nprovements and hardstand	\$5,000
	\$30,000
E TOTAL COST -	\$376,000

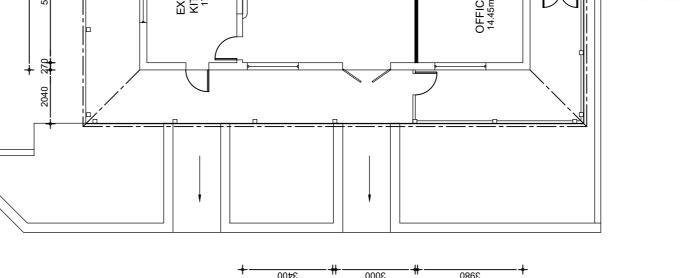
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AY, WATERLOO	Retain existing
	<ul> <li>Access to existin</li> <li>New VBFB vehic</li> </ul>
	Existing septic
	<ul> <li>Existing gravel a by small heavy a</li> </ul>
	New gravel harc
	New water tank
	TOTAL NEW BU
+	Existing Hall - 10
	Existing Kitchen
	Existing Store -
	Existing toilets - 2
12000	Existing Veranda
L	Existing Covered
	Offices and Store
6	Office / Training /
	Vehicle Shed - 12
TRAINING ROOM	Covered Link - 9.
29.40m <sup>2</sup>	Power connection
1330	Site preparation {
9000 1.100m2 1	New Septic System
	Access road impl
	Contingency
	APPROXIMATE

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# $\mathbf{N}$ - OPTION. **JO HALL SITE** INFORMATION SH VBFB AMALGAMATION WITH WATERI HIGH LEVEL CONCEP' PROJECT

SCOPE

Hall, kitchen, store, covered area and verandah.

sting toilet outbuilding.

hicle shed, office / training room and toilets including UAT.

system to be removed and new system installed.

el access road to be modified / upgraded for use

duty vehicles.

ardstand to entry area of vehicle shed.

nk as required by DFES.

INDICATIVE COST 3UILDING AREA -	184.10 sqm
100.30 sqm	
n - 17.50sqm	
- 12.50 sqm REFURBISH	\$60,000
dahs - 115.40 sqm	
ed Area - 61.50 sqm	
ore - 39.80 sqm PARTITION	\$15,000
g Area - 29.40 sqm	\$66,000
.121.90 sqm	\$150,000
.8.70 sqm	\$9,000
AT - 24.10 sqm	\$42,000
tion	\$5,000
n & Earthworks	\$20,000
stem	\$15,000
nprovements and hardstand	\$5,000
	\$33,000
E TOTAL COST -	\$420,000

CONCEPT

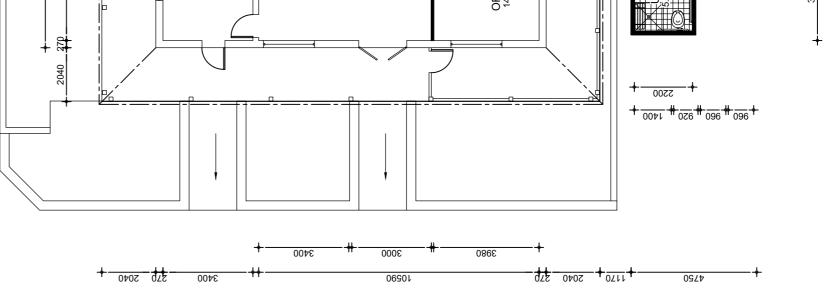
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	<ul> <li>Retain existing H</li> </ul>
	<ul> <li>Demolish existin</li> </ul>
	<ul> <li>New VBFB vehic</li> </ul>
	<ul> <li>Existing septic s</li> </ul>
	<ul> <li>Existing gravel a by small heavy a</li> </ul>
	<ul> <li>New gravel harc</li> </ul>
	<ul> <li>New water tank</li> </ul>
5150 + 3670 270 2040 + 4100	TOTAL NEW BU
EXISTING VERANDAH 115.40m <sup>2</sup>	<ul> <li>Existing Hall - 10</li> </ul>
	<ul> <li>Existing Kitchen</li> </ul>
17.50m <sup>2</sup>	<ul> <li>Existing Store - 1</li> </ul>
MEETING/ OPERATIONS 3040m <sup>2</sup>	<ul> <li>Existing Veranda</li> </ul>
	<ul> <li>Existing Covered</li> </ul>
	<ul> <li>Offices and Store</li> </ul>
CE STORE 14.45m <sup>2</sup>	<ul> <li>Office / Training /</li> </ul>
	<ul> <li>Vehicle Shed - 12</li> </ul>
	<ul> <li>Link passage - 8.</li> </ul>
	<ul> <li>Wet areas / UAT</li> </ul>
	<ul> <li>Power connection</li> </ul>
	<ul> <li>Site preparation §</li> </ul>
2500 + 150 + 130 + 150 + 1630 - VEHICLE SHED + 6230 - 121,90m <sup>2</sup> 8940	<ul> <li>New Septic System</li> </ul>
	<ul> <li>Access road impl</li> </ul>
	<ul> <li>Contingency</li> </ul>
	<ul> <li>APPROXIMATE</li> </ul>

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# OO HALL SITE - OPTION. 3

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- Hall and associated buildings.
- dify existing hall to accommodate VBFB.
- icle shed and UAT.
- access road to be modified / upgraded for use duty vehicles.
- rdstand to entry area of vehicle shed.
- k as required by DFES.

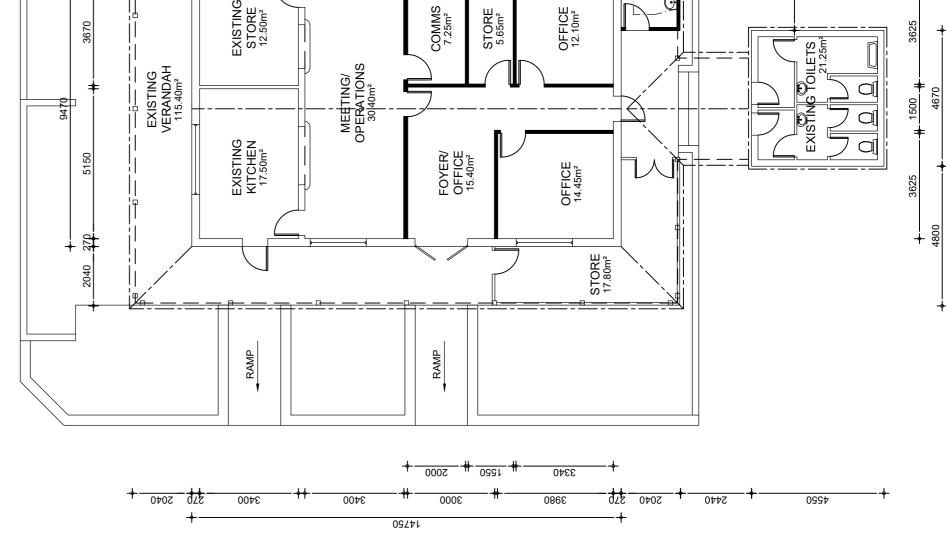
INDICATIVE COST	VE COST	
JILDING AREA -		109.70 sqm
- 17.50sqm		
12.50 sqm		
ahs - 115.40 sqm		\$60,000
d Area - 61.50 sqm		
41.95 sqm		
tions - 30.40 sqm	PARTITION	\$25 000
dT		
02.15 sqm		\$150,000
		\$20,000
U		\$5,000
& Earthworks		\$8,000
pgrade		\$15,000
provements and hardstand	tand	\$5,000
		\$30,000
TOTAL COST -		\$318,000

PROJECT INFO	<b>RMATION SHE</b>
HIGH LEVE	L CONCEPT
VBFB AMALGAMATION W	ITH WATERLO
VESTERN HIGHWAY, WATERLOO	
	Retain existing I
	<ul> <li>Renovate / mod</li> </ul>
	New VBFB vehi
	<ul> <li>Existing gravel a by small heavy a</li> </ul>
	<ul> <li>New gravel hard</li> </ul>
	New water tank
	TOTAL NEW BU
	Existing Kitchen
	Existing Store - 1
	Existing Veranda
	Existing Covered
	<ul> <li>Foyer / Offices - </li> </ul>
	<ul> <li>Meeting / Operat</li> </ul>
	<ul> <li>Comms - 7.25 sq</li> </ul>
	Store - 5.65 sqm
	Vehicle Shed - 1
	<ul> <li>UAT - 7.55 sqm</li> </ul>
	Power connection
755m <sup>2</sup>	Site preparation
0261	Septic System up
	Access road impl
	Contingency
CONCEPT LAYOUT	APPROXIMATE

# WATERLOO

# LOCATION PLAN - SOUTH V





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# 4 - OPTION **O HALL SITE** Č **PROJECT INFORMATION SH** VBFB AMALGAMATION WITH WATER HIGH LEVEL CONCEP.

SCOPE

Hall, kitchen, store, covered area and verandah.

Demolish existing toilet outbuilding.

New VBFB vehicle shed, equipment store, toilets and UAT.

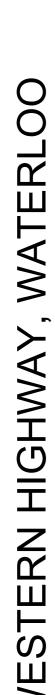
system to be removed and new system installed.

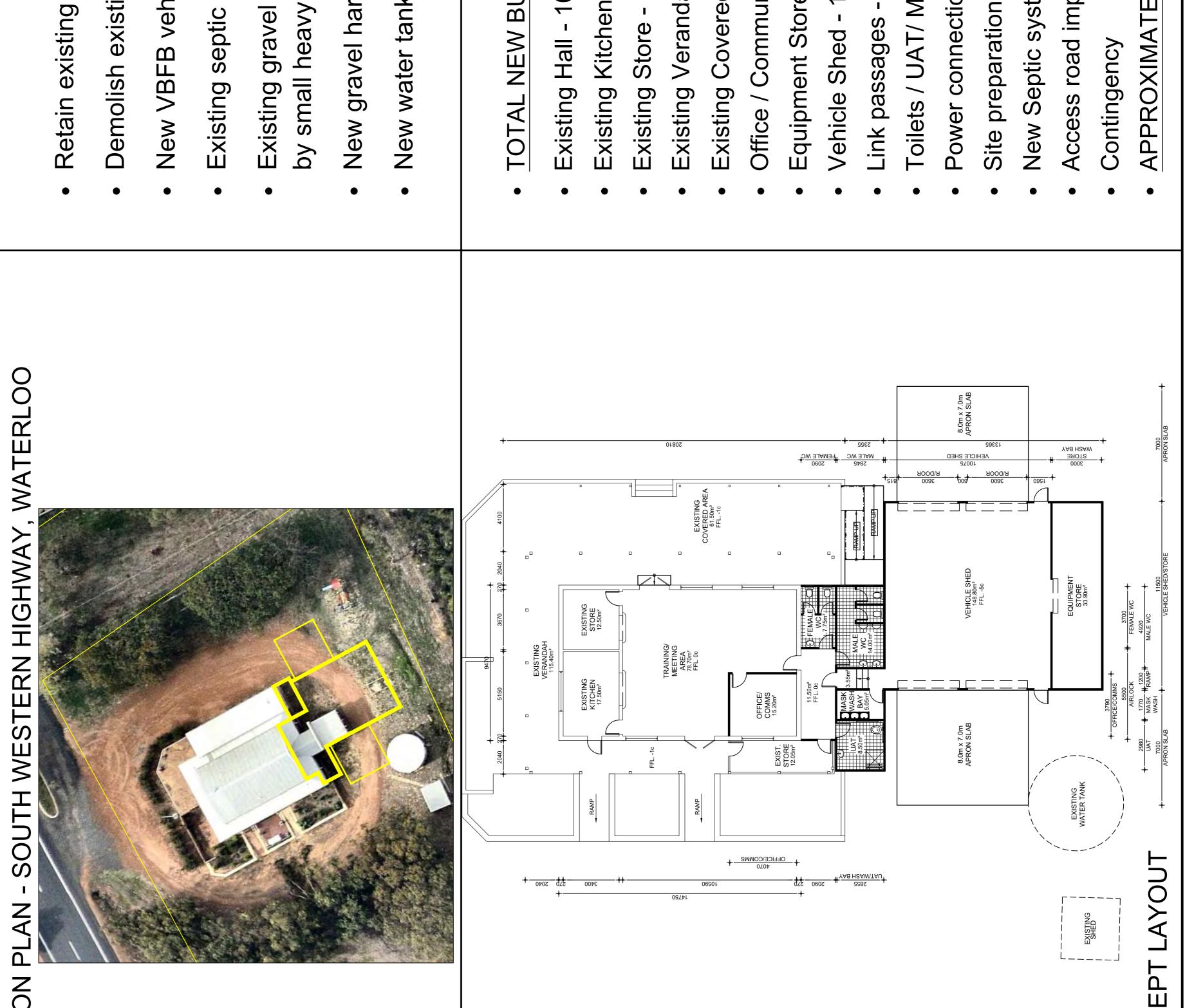
access road to be modified / upgraded for use duty vehicles.

New gravel hardstand to entry area of vehicle shed.

New water tank as required by DFES.

INDICATIVE COST 3UILDING AREA -	207.25 sqm
100.30 sqm	
n - 17.50sqm	
- 12.05 sqm	\$30,000
dahs - 115.40 sqm	
ed Area - 61.50 sqm	
unications - 15.20 sqm PARTITION	\$12,000
re - 33.90 sqm	\$51,000
148.80 sqm	\$150,000
- 15.05 sqm	\$12,000
Mask wash bay - 35.30 sqm	\$70,000
tion	\$5,000
n & Earthworks	\$20,000
stem and Air conditioning	\$30,000
uprovements and hardstand	\$5,000
	\$40,000
E TOTAL COST -	\$425,000





### R **VA** LOCATION

CONCEPT

### FORM LAA-1023

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WESTERN AUSTRALIA LAND ADMINISTRATION ACT 1997 TRANSFER OF LAND ACT 1893 AS AMENDED

### MANAGEMENT ORDER (XE)

**RESERVE DESCRIPTION (NOTE 1)** 

Reserve 5567

### (Appendix ORD: 12.6B)

BUPLICATE

EXTENT VOLUME FOLIO 3124 139

### MANAGEMENT BODY (NOTE 2)

Shire of Dardanup, 1 Council Drive, Eaton

### CONDITIONS (NOTE 3)

1) To be used for its designated purpose only 2) Power to lease for the designated purpose (or sub-lease or licence) is granted for the whole or any portion thereof for any term not exceeding twenty-one (21) years from the date of the lease subject to the approval in writing of the Minister for Lands being first obtained to each and every lease or assignment of lease, pursuant also to the provisions of section 19 of the Land Administration Act 1997.

THE MINISTER FOR LANDS (IN THE NAME OF AND ON BEHALF OF THE STATE OF WESTERN AUSTRALIA) ORDERS THAT THE CARE, CONTROL AND MANAGEMENT OF THE ABOVE RESERVE BE PLACED WITH THE ABOVE DESCRIBED MANAGEMENT BODY FOR THE PURPOSE FOR WHICH THE LAND IS RESERVED UNDER SECTION 41 OF THE LAND ADMINISTRATION ACT 1997, AND FOR PURPOSES ANCILLARY OR BENEFICIAL TO THAT PURPOSE SUBJECT TO THE CONDITIONS STATED ABOVE

Dated this	lith	day of	May	 in the year 20	100
ATTESTATION	~		$\Box$		
	Amar.				
	PROJECT OFFICER				
	SOUTH WEST REGION	N SERVIC	ES		

SECTION 46

### INSTRUCTIONS

1. If insufficient space in any section, Additional Sheet Form B1 should be used with appropriate headings. The boxed sections should only contain the words "See Annexure".

2. Additional Sheets shall be numbered consecutively and bound to this document by staples along the left margin prior to execution by parties.

3. No alteration should be made by erasure. The words rejected should be scored through and those substituted typed or written above them, the alteration being initialled by the person signing this document and their witnesses.

### NOTES

1. RESERVE DESCRIPTION Reserve number and details to be stated. The Volume and Folio numbers to be stated.

2. MANAGEMENT BODY State the full name and address of the management body.

### 3. CONDITIONS

Specify all conditions to be observed by the lessee in the operation of the area affected by this permit.

### 4. EXECUTION

A separate attestation is required for every person signing this document. Each signature should be separately witnessed by an Adult Person. The address and occupation of the witness must be stated.

EXAMINED

### (Appendix ORD: 12.6B) DIIPI ICATE



### MANAGEMENT ORDER (XE)

LODGED BY Land Administration Services Branch

ADDRESS DOLA South West Services

PHONE No.

FAX No.

REFERENCE No. Gavin Penn 1536/1898 ph.9791 0860

ISSUING BOX No.

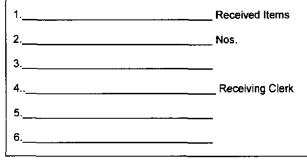
PREPARED BY Land Administration Services Branch

ADDRESS DOLA South West Services

PHONE No. FAX No.

INSTRUCT IF ANY DOCUMENTS ARE TO ISSUE TO OTHER THAN LODGING PARTY

### TITLES, LEASES, DECLARATIONS ETC LODGED HEREWITH



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Registered pursuant to the provisions of the TRANSFER OF LAND ACT 1893 as amended on the day and time shown above and particulars entered in the Register.

DOLA BOX 98



				ISSUED		.6B)
	Application H747319 Revocation H747320 Amendment of Reserve H747321	WESTERN		AUSTRALIA	3124	139
	Corr. 01536-1898-01ro	QUALIFIE	D CEI OF	RTIFICATE		
	U	CROWN NDER THE "TRANSFER AND THE "LAND A	LAN OF LAND			
		The undermentioned lan STATE of WE d status orders in the First sements, encumbrances ar	STERN	AUSTRALIA, which interests and st	atus orders are subjec	t to the
: i (or a pages)	Dated 14 May 2001				Ju Hyde REGISTRAR OF TIT	LES
- age		LAND R	EFERRE	CD TO		
	Collie Agricultural Area Lot 100 o	n Deposited Plan 26022.			x	
		THIRD	SCHED	ULE		
	PUPPCIES OF					
		ETCH OF LANE AM QUOTED IN		·····		]
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# QUALIFIED CERTIFICATE OF CROWN LAND TITLE

VOL. 3124 FOL. 139

		SEAL				(A	ppendix ORD: 12.6B)
	DEGICTERED	OR LODGED				REGISTERED	OH LODGED
		NUMBER					NUMBER
TS		CANCELLATION			ITS		CANCELLATION
SEMEN		SEAL	I		RSEMEN		SEAL
T ENDO		TIME	14.22	14.22			
UBSEQUEN		REGISTERED	14.5.01	14.5.01	SUBSEQUENT ENDORSEMENTS		REGISTERED
EDULE NOTE: ENTRIES MAY BE AFFECTED BY SUBSEQUENT ENDORSEMENTS		PARTICULARS	Reserve No. 5567 for the purpose of Agricultural Hall	Care, Control and Management to Shire of Dardanup 1 Council Drive. Eaton, with power to lease for any term not exceeding 21 years subject to the consent of the Minister for Lands	NOTE: ENTRIES MAY BE AFFECTED BY		PARTICULARS
FIRST SCHEDULE	Ę		H747321 F	H747322	SECOND SCHEDULE	Ŀ	
	INSTRUMENT		of	Management		INSTRUMENT	NATURE

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ABN: 86 574 793 858

(Appendix ORDoll 2: 68) RE, MIDLAND WESTERN AUSTRALIA Postal Address: PO Box 2222

Postal Address: PO Box 2222 Midland, Western Australia 6936

General Enquiries: (08) 9273 7373 TTY: (08) 9273 7571 Website Address: www.dola.wa.gov.au

 Your Ref:
 1536-1898 (Job No. 004545)

 Our Ref:
 1536-1898 (Job No. 004545)

 Telephone:
 (08) 9273 7258 Facsimile: (08) 9273 7685

 Enquries:
 Mrs R Monastra

 Email:
 rosanna\_monastra@dola.wa.gov.au

Chief Executive Officer Shire of Dardanup 1 Council Drive EATON WA 6232 Registration Number: SHIRE OF DARDANUP 2 4 AUG 2001 Retention / Disposai: Dept / Officer: File Number:

Dear Sir

**RESERVE 5567** 

I advise for your information that Collie Agricultural Area Lot 100, has been set apart as Reserve 5567, for the purpose of "Agricultural Hall", with a Management Order (formerly Vesting Order) issued in favour of the Shire of Dardanup.

Under the Land Administration Act document registration system, Management Orders are registered on the Crown Land Title for the reserve and become effective on the date of registration, and I enclose a file copy for your information.

In this regard, please find enclosed the duplicate copy of the Management Order for Reserve 5567, registered on 14 May 2001, from our Crown Title Creation Section.

Yours faithfully

longhe.

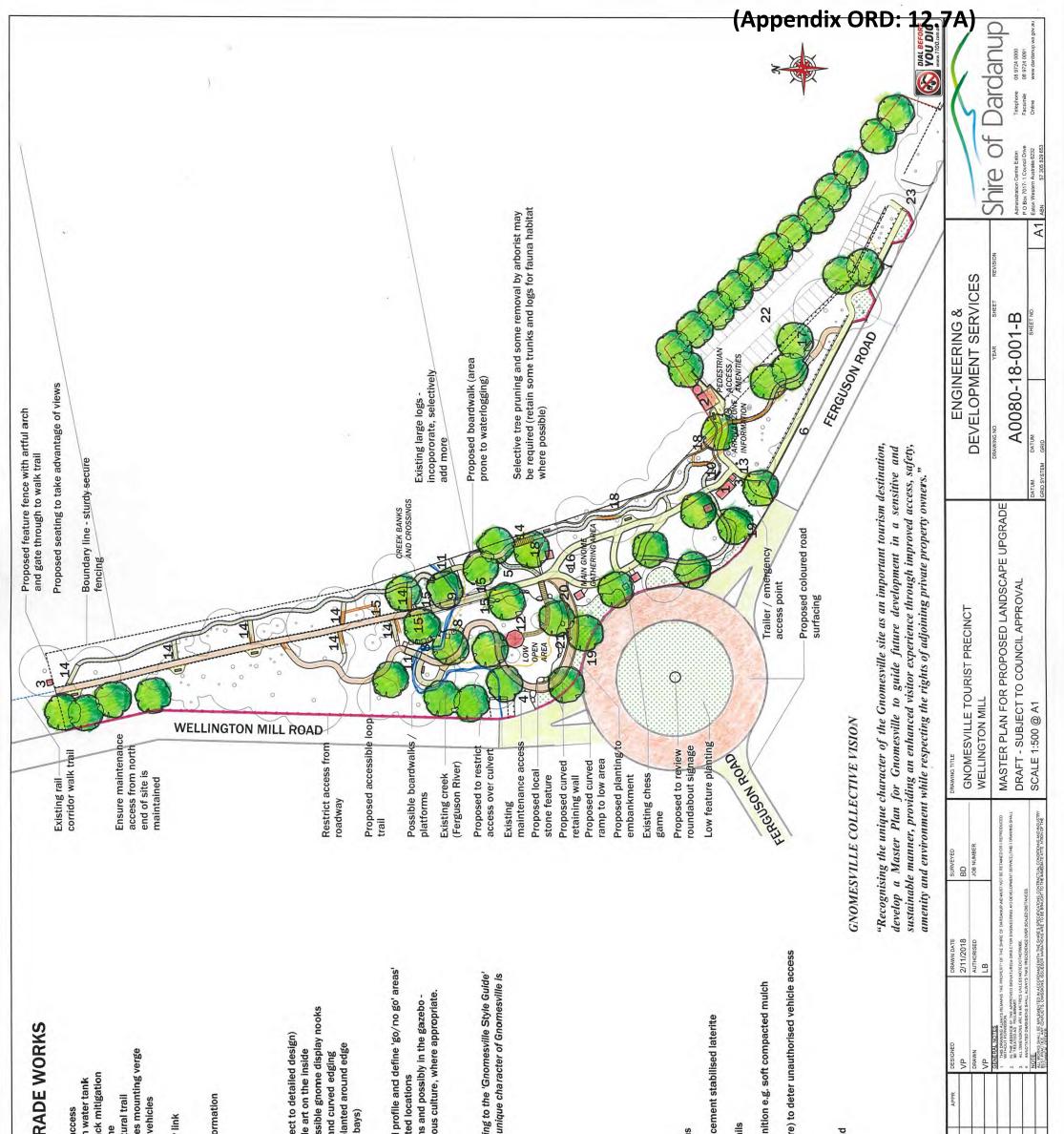
ROSANNA MONASTRA OFFICER SOUTH WEST SERVICES LAND INFORMATION AND ADMINISTRATION SERVICES

22 August, 2001 Att

Not 3. Malate system Recare with Sharon to file. Eller with Sharon to file. (Filer Stroophould field.

			RISI	<b>RISK ASSESSMENT TOOL</b>	ENT TOOL			
<b>OVERALL RISK EVENT:</b>		Waterloo Volunteer Bushfire Brigade		sedevelopmen	Redevelopment – Management Order Issue			
<b>RISK THEME PROFILE:</b>	FILE:							
13 - Project/Change Management	ige Management							
RISK ASSESSMENT CONTEXT:	T CONTEXT: Project							
		PRIOR TO T	PRIOR TO TREATMENT OR	R CONTROL		AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	гікегіноор	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	A/N	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	Issue if Waterloo Hall is developed not strictly in accordance with the Management Order	Minor (2)	Possible (3)	Moderate (5 - 11)	Seek clarification from DPLH and change Management Order if required.	Minor (2)	Rare (1)	Low (1 - 4)
REPUTATIONAL	Council might be seen in a negative light if it developed an area not in accordance with the Management Order	Minor (2)	Possible (3)	Moderate (5 - 11)	Seek clarification from DPLH and change Management Order if required.	Minor (2)	Rare (1)	Append (1 - 4)
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	A/N	Not required.	Not required.	Not required.	Not required.

### (Appendix ORD: 12.6C)



# KEY OF PROPOSED LANDSCAPE UPGRADE WORKS

Proposed new bus parking bays - high kerb to deter vehicles mounting verge Proposed new foot / wheelchair / pram wash bays - dieback mitigation Steep 'lush' area - proposed narrow winding steps and natural trail Proposed new bus or caravan parking - high kerb to deter vehicles Location for pop up visitor centre and associated vehicle access Proposed new elevated feature bridge over creek - railway link Proposed new vehicle brush down pads - crushed limestone Proposed new toilets - two accessible unisex cubicles, with Proposed new mini 'decks' - access platforms / feature Proposed new creek bridges / possible boardwalk links Proposed refurbished information sign

Proposed new shade shelter with seating and possible information Proposed quirky artful arrival directional signage

Steps - upgrade existing / construct new

Existing wishing well - refurbish Proposed steep track closure

Proposed bicycle parking

Proposed sculptural boundary / art / display feature (subject to detailed design)

Proposed new bitumen seal to car park access driveway

23

logs, steppers and mulch proposed throughout to build soil profile and define 'go/no go' areas' themes to be inclusive of gnomes, native flora/fauna and Indigenous culture, where appropriate. Proposed interpretive signage at selected locations along the paths and possibly in the gazebo Fauna boxes for possums, bats and cockatoos - proposed in selected locations A poetic story of Gnomesville. Rocks,

No bins are currently proposed to be included in the master plam.

All landscape works should endeavour to be implemented according to the 'Gnomesville Style Guide' which serves as an overlay to this master plan, to ensure that the preserved and enhanced.

\$	LEGEND
	Proposed new local native trees
	Proposed new native understorey planting
8	Proposed new artwork location
	Proposed new sealed exposed aggregate paths
	Proposed new sealed 'natural look' paths e.g. c
2	Proposed new soft compacted mulch / dirt trail
)	Informal trails which may warrant natural defini
į	Proposed new bollards (or rocks $/$ other feature
0	Proposed new picnic tables
	Proposed new seat with $/$ without concrete pad
	Existing tree trunks and vegetation canopy
.)	
500 խոսուղտուուրուուղուու 0 5m 10 15 20	:500 րուսուրտուորտուորտուրտուրտուրտուրտուրտուրտու

DATE

			RISI	<b>ISK ASSESSMENT TOOL</b>	ENT TOOL			
<b>OVERALL RISK EVENT:</b>		Regional Economic Development Grant		Applications				
<b>RISK THEME PROFILE:</b>	FILE:							
<ol> <li>Management of Facilities, Ver</li> <li>Project/Change Management</li> </ol>	10 - Management of Facilities, Venues and Events 13 - Project/Change Management	ents						
<b>RISK ASSESSMENT CONTEXT:</b>	T CONTEXT: Strategic							
		PRIOR TO T	PRIOR TO TREATMENT OR	OR CONTROL		AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	<b>LIKELIHOOD</b>	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
<b>FINANCIAL</b> IMPACT	No additional funding is required from Council to support this application	Insignificant (1)	Unlikely (2)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
ENVIRONMENT	Environmental concerns were addressed in the creation of the Master Plan.	Insignificant (1)	Unlikely (2)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.

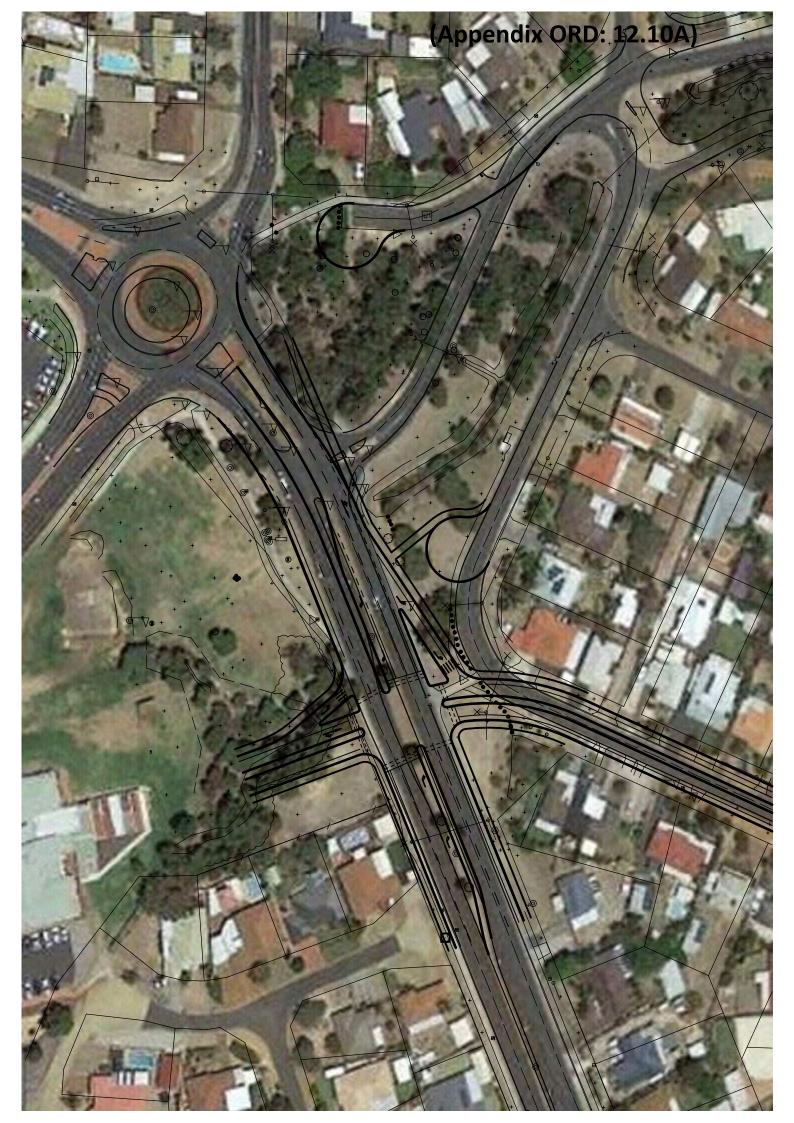
### (Appendix ORD: 12.7B)

			RISH	ISK ASSESSMENT TOOL	ENT TOOL			
<b>OVERALL RISK EVENT:</b>		Ferguson Valley Marketing – End of Tria		l Relocation				
<b>RISK THEME PROFILE:</b>	FILE:							
<ol> <li>Asset Sustainability Practices</li> <li>Business and Community Disi</li> </ol>	<ol> <li>Asset Sustainability Practices</li> <li>Business and Community Disruption</li> </ol>			10 - 1	10 - Management of Facilities, Venues and Events	vents		
<b>RISK ASSESSMENT CONTEXT:</b>	IT CONTEXT: Strategic							
		PRIOR TO TI	PRIOR TO TREATMENT OR	R CONTROL	BISK ACTION BLAN	AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	There is minimal risk of financial cost beyond what is projected.	Minor (2)	Rare (1)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	Loss of visitor servicing	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	Lack of support for tourism operators	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required	Not required.	Not required.	Not required.

			RISI	<b>RISK ASSESSMENT TOOL</b>	ENT TOOL			
OVERALL RISK EVENT: RISK THEME PROFILE:		Scheduling of Advisory Group Meeting	up Meeting					
6 - Engagement Practices	ractices							
<b>RISK ASSESSMENT CONTEXT:</b>	T CONTEXT: Operational	nal						
CONSECUTENCE		PRIOR TO T	PRIOR TO TREATMENT OR	OR CONTROL	BISK ACTION BLAN	AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	<b>LIKELIHOOD</b>	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	Not enabling community input into Council decisions	Moderate (3)	Rare (1)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.







			RISI	SK ASSESSMENT TOOL	ENT TOOL			
<b>OVERALL RISK EVENT:</b>		Intersection Treatments on Eaton Drive	า Eaton Drive ar	id Hands Avenu€	and Hands Avenue – Project Delivery			
<b>RISK THEME PROFILE:</b>	FILE:							
13 - Project/Change Management	ge Management							
RISK ASSESSMENT CONTEXT:	T CONTEXT: Project							
		PRIOR TO T	PRIOR TO TREATMENT OR CONTROL	CONTROL		AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	гікегіноор	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	A/N	Not required.	Not required.	Not required.	Not required.
<b>FINANCIAL</b> IMPACT	The loss of external funding should the project not continue.	Minor (2)	Possible (3)	Moderate (5 - 11)	Continue project development in a timely manner.	Minor (2)	Rare (1)	Low (1 - 4)
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	The potential of legal action against Council for not mitigating the risk accidents	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Develop appropriate designs to mitigate the risk of accidents.	Minor (2)	Unlikely (2)	Low (1 - 4)
REPUTATIONAL	Not mitigating risk of accidents and poor communication and Community consultation.	Moderate (3)	Possible (3)	High (12 - 19)	Develop an appropriate project delivery framework to mitigate the risk	Moderate (3)	Possible (3)	Moderate (5 - 11)
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.



Department of **Biodiversity**, Conservation and Attractions



We're working for Western Australia.

Your ref:Our ref:2019/000420Enquiries:Paul RobertsPhone:9771 7942Email:Paul.Roberts@dbca.wa.gov.au

Mr Andre Schonfeldt Chief Executive Officer Shire of Dardanup PO Box 7016 EATON WA 6232

Dear Mr Schonfeldt

### PROPOSED GREATER BUNBURY REGIONAL PARK DRAFT MANAGEMENT PLAN

The Department of Biodiversity, Conservation and Attractions (DBCA) is coordinating the preparation of a draft management plan for the proposed Greater Bunbury Regional Park under the *Conservation and Land Management Act 1984*.

The creation of two regional parks (Preston River to Ocean Regional Park and Leschenault Regional Park) was an election commitment of the State Government and is a key part of <u>Plan For</u> <u>Our Parks</u>, which aims to create five million hectares of new national and marine parks and reserves across Western Australia.

The regional parks consist of lands that have been identified as Regional Open Space under the Greater Bunbury Region Scheme and managed by a range of agencies, local governments and private landholders including the Shire of Dardanup. <u>Establishment plans</u> were prepared for both parks by the Department of Planning, Lands and Heritage. The proposed management plan for the regional parks will provide strategic guidance to all local and State government agencies managing lands in the parks.

A Community Advisory Committee, established to provide advice to DBCA and other land managers, has recommended that the two parks be amalgamated into one regional park, which the draft management plan has adopted. DBCA is also undertaking consultation with representatives from the Gnaala Karla Booja Native Title Working Group to identify a Noongar name for the regional park, with 'Greater Bunbury' being utilised as a temporary name.

An inter-agency working group involving agencies and local governments with land management responsibilities within the park has been closely assisting and reviewing the preparation of the draft management plan throughout 2019. The Shire of Dardanup has been represented by Mr Nathan Ryder, Manager Operations, in this process.

DBCA is now formally seeking the Shire's endorsement of the attached *Greater Bunbury Regional Park Draft Management Plan 2020.* 

Following agency approvals, the draft management plan will be forwarded to DBCA's executive, the Conservation and Parks Commission and the Minister for Environment for endorsement and approval to release the plan for a minimum two-month public submissions period before being finalised.

The final management plan will be prepared based on comments received on the draft and will be referred to the Shire again for endorsement. The final plan will guide the management of the proposed regional park for 10 years.

If you have any queries about the management plan, please contact Regional Parks Coordinator, Aminya Ennis at <u>aminya.ennis@dbca.wa.gov.au</u> or 9725 4300, or Planning Officer Paul Roberts on the above email or (08) 9771 7942.

DBCA looks forward to continuing to work with the Shire and other management agencies to achieve the establishment and ongoing management of the regional park.

Yours sincerely

Bob Hagan Regional Manager

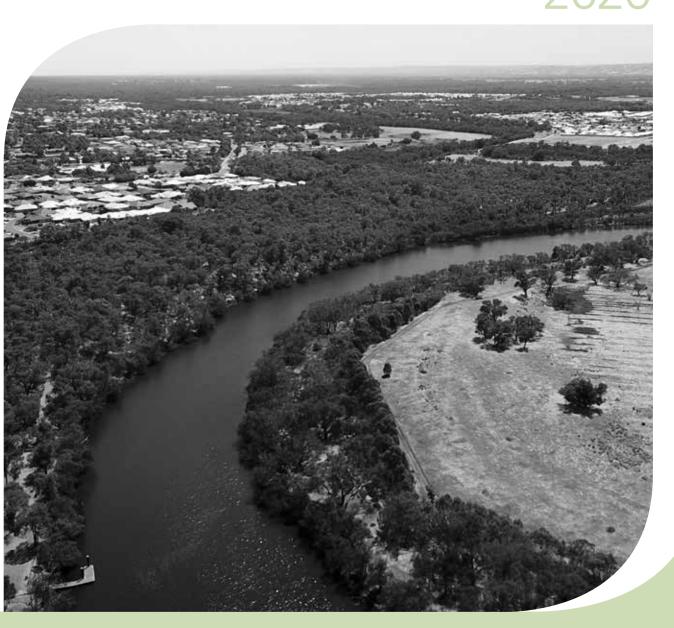
27 March 2020

- CC Mr Nathan Ryder, Manager Operations, Shire of Dardanup
- Att Greater Bunbury Regional Park Draft Management Plan 2020





### Greater Bunbury Regional Park Draft management plan





Department of Biodiversity, Conservation and Attractions Conservation and Parks Commission Department of Communities Department of Planning, Lands and Heritage Department of Water and Environmental Regulation Western Australian Blanging Commission











Department of Biodiversity, Conservation and Attractions 17 Dick Perry Avenue KENSINGTON WA 6151

Phone: (08) 9219 9000 Fax: (08) 9334 0498 dbca.wa.gov.au

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June 2020

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ISBN 978-1-925978-07-0 (online)

This management plan was prepared by the Conservation and Parks Commission through the agency of the Department of Biodiversity, Conservation and Attractions.

Questions regarding this management plan should be directed to: Planning Unit Department of Biodiversity, Conservation and Attractions Locked Bag 104 Bentley Delivery Centre WA 6983

Phone: (08) 9219 9000

The recommended reference for this publication is: Department of Biodiversity, Conservation and Attractions (2020) Greater Bunbury Regional Park draft management plan, 2020. Department of Biodiversity, Conservation and Attractions, Perth.

This document is available in alternative formats on request.

Please note: URLs in this document which conclude a sentence are followed by a full point. If copying the URL please do not include the full point.

### Front cover photos

Main: Aerial view of the park and Collie River from the Elbow (bottom left) to the Junction (top right). *Photo – Shem Bisluk/DBCA* 

Top left: The critically endangered curlew sandpiper (*Calidris ferruginea*). *Photo – Georgina Steytler* Top right: Visitors enjoying a walk within the park. *Photo – Hendersons Photographics/South West Catchments Council* 

Header photo: Aerial view northwards across Shearwater Tuart Forest and Maidens Reserve towards Bunbury. *Photo – Shem Bisluk/DBCA* 

### Greater Bunbury Regional Park draft management plan

Conservation and Parks Commission

Department of Biodiversity, Conservation and Attractions

City of Bunbury

Shire of Capel

Shire of Dardanup

Shire of Harvey

Department of Communities

Department of Planning, Lands and Heritage

Department of Water and Environmental Regulation

Western Australian Planning Commission

Water Corporation

Greater Bunbury Regional Park draft management plan

### VISION

Ngalang Boodja Danjoo – Our land, together. Greater Bunbury Regional Park protects Noongar culture and coastal plain plants, animals and landforms for present and future generations to learn about, respect, care for and enjoy. This path we leave to those who follow us: walk slowly together to a place of pretty rocks and water – Dabakarn Koorliny Danjoo Quobba Keip Boya. Greater Bunbury Regional Park draft management plan

### INVITATION TO COMMENT

This draft management plan has been released for a two-month period to provide the public with an opportunity to comment on how the park is proposed to be managed during the next 10 years.

To ensure your submission is as effective as possible:

- be clear and concise
- refer your points to the page numbers or specific sections in the plan
- say whether you agree or disagree with any of or all the management arrangements clearly state your reasons, particularly if you disagree
- give sources of information where possible
- suggest alternatives for those aspects of the plan with which you disagree.

The management plan will be reviewed in light of the submissions, according to the criteria outlined below. A summary of public submissions will be made available along with the final management plan.

The draft management plan may be modified if a submission:

(a) provides additional information of direct relevance to management

(b) indicates a change in (or clarifies) government legislation or management policy

- (c) proposes strategies that would better achieve management objectives
- (d) indicates omissions, inaccuracies or a lack of clarity.

The draft management plan may not be modified if a submission:

(a) clearly supports proposals in the plan or makes general or neutral statements

(b) refers to issues beyond the scope of the plan

(c) refers to issues that are already noted within the plan or already considered during its preparation

(d) is one among several widely divergent viewpoints received on the topic but the approach in the plan is still considered the best option

(e) contributes options that are not feasible (generally due to conflict with legislation or government policy) (f) is based on unclear or factually incorrect information.

The plan can be viewed and submissions made online at dbca.wa.gov.au/haveyoursay.

Alternatively, you can write to:

Planning Unit Parks and Wildlife Service Department of Biodiversity, Conservation and Attractions Locked Bag 104 Bentley Delivery Centre WA 6983

Greater Bunbury Regional Park draft management plan

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Greater Bunbury Regional Park draft management plan

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Map 3a. Vegetation - south	
Map 3b. Vegetation - north	
Map 4a. Recreation, access and management zones - south	
Map 4b Recreation access and management zones - north	

### Management context

### 1. Purpose of the plan

The purpose of the *Greater Bunbury Regional Park Management Plan* (the plan) is to provide for the protection and enhancement of the conservation, recreation and landscape values of the Greater Bunbury Regional Park (the 'regional park' or 'park') (Map 1). The plan aims to conserve the special features of the park and sustainably manage the park's natural and cultural values while allowing an appropriate level of use by the community.

The plan has been prepared by the Conservation and Parks Commission through the agency of the Department of Biodiversity, Conservation and Attractions (DBCA) in accordance with section 8F(2), section 54(1) and other relevant sections of the *Conservation and Land Management Act 1984* (CALM Act). The plan:

- provides a statutory framework for the management of lands within the park vested in the Conservation and Parks Commission (section 19[1][a] of the CALM Act) and managed by DBCA (DBCA-managed lands) on behalf of the Conservation and Parks Commission
- guides DBCA in coordinating the management of land within the regional park in accordance with sections 8F(1) and 33(1)(ab) of the CALM Act, including the involvement of other managing agencies
- provides guidance to other land management agencies for the integrated planning and management of their lands in the regional park
- provides guidance to the Western Australian Planning Commission (WAPC) in the assessment of development proposals on lands within the park to ensure that proposed land use is not detrimental to park values and management.

Local governments and State Government agencies that control land within the park include the City of Bunbury (CoB), Shire of Capel (SoC), Shire of Dardanup (SoD), Shire of Harvey (SoH), Department of Communities (DoC), Department of Water and Environmental Regulation (DWER), WAPC and the Water Corporation (WC).

Once this plan is gazetted, it will prevail<sup>1</sup> over historic management plans for areas of the park such as Leschenault Peninsula Conservation Park and Morangarel Nature Reserve (DPaW 2016), Manea Park (Jennings 1999), Shearwater (Usher Dalyellup) Tuart Forest (Ecoscape 2002) and Wardandi Flora Reserve (Shire of Harvey 2012), and is also complementary to the *Forest Management Plan 2014-23* (CCWA 2013). Other subsidiary masterplans or management plans remain in place for specific sites or reserves in the park, such as <u>Eaton Foreshore</u> and Ridley Place Foreshore Park, that are identified by a management agency as being current.

### What is a regional park?

Regional parks are areas of Regional Open Space (ROS) identified within the Western Australian (WA) planning framework as having regionally significant conservation, landscape or recreation values, as specified under section 8E of the CALM Act. The <u>Greater Bunbury Region Scheme</u> (GBRS) is the statutory document that provides for the creation of the Greater Bunbury Regional Park, through the reservation<sup>2</sup> of ROS.

A regional park is a land management system that provides the opportunity for a coordinated planning and management approach by different land management agencies and private landowners. Under section 8E(2) of the CALM Act, a regional park may consist of lands with a variety of tenures and purposes including:

<sup>&</sup>lt;sup>1</sup> Where there is any inconsistency between the plans.

<sup>&</sup>lt;sup>2</sup> Reserved land with respect to ROS refers to land reserved under a Region Scheme for a public purpose ('planning reserves'), as distinct from reserved land held by the Crown that is owned by or vested in a public authority under the *Land Administration Act 1997* ('Crown reserves') or other relevant legislation such as the CALM Act for 'conservation reserves'. 'Reserves' in this plan will generally refer to 'Crown reserves' or sometimes 'conservation reserves' where relevant.

### Greater Bunbury Regional Park draft management plan

- CALM Act lands under section 5(1) of the CALM Act (such as national and conservation parks and nature reserves)
- private or alienated lands (where the agreement of the landowner is obtained) or other Crown lands vested in local government authorities or State Government agencies other than the Conservation and Parks Commission, as per section 8D of the CALM Act.

### Legislative and policy framework

A variety of legislation and policies/guidelines<sup>3</sup> apply to the management of the park (mentioned throughout this plan), although key pieces of legislation include:

- CALM Act
- *Biodiversity Conservation Act 2016* (Biodiversity Conservation Act)
- Greater Bunbury Region Scheme
- Local Government Act 1995
- Land Administration Act 1997
- Planning and Development Act 2005
- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)
- Aboriginal Heritage Act 1972.

### 2. Location, reservation and regional setting

Greater Bunbury Regional Park comprises a mosaic of lands around Bunbury and the Leschenault Estuary within the local government areas of the City of Bunbury, Shire of Capel, Shire of Dardanup and Shire of Harvey (Map 1). While two proposed regional parks were originally embodied in the *Preston River to Ocean Regional Park Establishment Plan* (WAPC 2011) and the *Leschenault Regional Park Establishment Plan* (WAPC 2017a), these two proposed regional parks were indicative and in the process of preparing this plan a decision has been made to amalgamate all parts of the two proposed parks into one regional park.

The park covers an area of about 3,168ha and is fragmented into three general parts (Table 1), although there are also many distinct areas that make up these



View eastwards over the Preston River to Ocean bushbelt from Shearwater Tuart Forest towards Tuart Brook/Five Mile Brook, Hay Park and Manea Park. Photo – Shem Bisluk/DBCA

parts of the park (Maps 2a and 2b). The park does not include the waters/waterways of the Leschenault Estuary and Inlet<sup>4</sup> or the Preston, Collie and Brunswick rivers.

Table 1. Summary of th	ne park
------------------------	---------

Feature		Description	
	Leschenault part	Preston River to Ocean	Preston River Link
Location	East and northeast of Bunbury mainly along the foreshores of the Leschenault Estuary and Inlet and the Collie and Brunswick rivers including the lands within the Leschenault Peninsula	South of Bunbury about 5km from the city centre and mainly within the City of Bunbury	Southeast of Bunbury along the foreshores of the Preston River
Area (ha)	2,148	878	142
Tenure	Crown reserves vested in and managed by DBCA, City of Bunbury, Shire of Dardanup, Shire of Harvey and DWER, unmanaged Crown reserves and unallocated Crown land	Crown reserves vested in and managed by the City of Bunbury, Shire of Capel, Water Corporation and Aqwest,	Crown reserves vested in and managed by the City of Bunbury, unmanaged Crown reserves and UCL, as

<sup>3</sup> Policies and guidelines applicable to the management of the park can be found on managing agency, Conservation and Parks Commission and other relevant websites. If there is any inconsistency between this plan and new or revised legislation and policy, then park management will be in accordance with the relevant new or revised legislation or policy.

<sup>4</sup> The Leschenault Estuary and Leschenault Inlet were originally one continuous estuarine system before 'The Cut' was created in 1951 through the sand dunes opposite the mouth of the Collie River, and when the Preston River was realigned and the Bunbury Inner Harbour was completed in 1975 the water body was separated into two parts (WAPC 2017a).

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Feature	Description		
	Leschenault part	Preston River to Ocean	Preston River Link
	(UCL), as well as freehold land owned by the City of Bunbury, Shire of Harvey, DBCA, WAPC, DWER, Water Corporation, Main Roads WA and privately-owned land	unmanaged Crown reserves and UCL, as well as freehold land owned by the WAPC, DoC - Housing Authority, Water Corporation and privately- owned land	well as freehold land owned by the City of Bunbury, WAPC, DWER, South West Development Commission, Main Roads WA and privately-owned land
Park boundary	Leschenault Peninsula Conservation Park boundary extends to the low water mark next to the coast (CALM 1998). However, the coastal side of lots 3 and 4 on Plan 3957 on the Leschenault Peninsula, most of the remaining Leschenault Estuary including Turkey Point and the Collie and Brunswick rivers extend to the mean high-water mark	Crown reserve 670 within Maidens Reserve lies next to the coast and extends to the high- water mark at the coast	The boundary of this part of the park extends to the mean high-water mark along the Preston River as far south as the South Western Highway
Biogeographic region and catchment	The park extends about 11km inland and eastwards up the Collie River from its mouth into the Leschenault Estuary, and another 7km northwards along the Brunswick River from where it meets the Collie River. The park forms an almost continuous link along the foreshores of the estuary and the rivers	The park extends over a 7km contiguous east-west natural vegetation corridor stretching from the Preston River in the east to the coast in the west	The park provides a link between the Leschenault Estuary and the Preston River to Ocean parts of the park

The realignment of the Preston River as part of the planned expansion of the Bunbury Port outlined within the *Bunbury Port Inner Harbour Structure Plan 2009*, was to include additional areas of ROS into the Preston River Link. A revised structure plan is being prepared, which may result in additional areas of ROS being included in the park once the planning, approvals and implementation of the Bunbury Port expansion and Preston River realignment is complete.

### 3. Park values

Table 2. Summary of key values of the park

### Natural values

- regionally significant landforms and sequences
- regionally significant wetlands
- threatened native plant species of State and national significance (KPI)
- <u>threatened ecological communities</u> (TECs) and other vegetation of regional, State and national significance (KPI)
- threatened native animal species of international, national and State significance
- regionally significant habitats (tuart forests and woodlands, waterbird feeding and breeding areas)
- regional ecological linkages

### Cultural heritage values

- registered Aboriginal sites of archaeological, mythological, ceremonial, cultural and spiritual significance (KPI)
- traditional cultural and ecological knowledge
- heritage sites associated with early exploration, shipping and settlement

### Recreation, tourism and community value

- a diversity of recreational experiences, opportunities and sites/facilities in coastal, riverine and forest/woodland environments such as bushwalking, cycling, picnicking, camping, birdwatching, nature appreciation, beach four-wheel driving, fishing, swimming and boating
- scenic values of the Leschenault Peninsula, rivers, estuary, ocean, tuart forests, banksia woodlands and Maidens Reserve
- highly engaged and interested urban community consisting of volunteers (KPI), community groups, visitors (KPI), neighbours and residents

### Other values

- underlying groundwater aquifers of the Bunbury Groundwater Area are a significant drinking water source for the greater Bunbury region
- water, powerline, road and other infrastructure provide essential services to the community
- knowledge about natural, cultural, recreation and landscape values of the park and the impacts on them

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Map 1. Greater Bunbury Regional Park overview

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### 4. Land tenure and boundaries

### Boundaries

The boundaries of the regional park are based on the *Preston River to Ocean Regional Park Establishment Plan* (WAPC 2011) and the *Leschenault Regional Park Establishment Plan* (WAPC 2017a). Park boundaries are shown on Maps 1, 2a and 2b.

Several small anomalies at the ROS/urban interface have been identified across the park, where the boundaries set at the time of the GBRS coming into effect do not match final cadastral boundaries of adjoining subdivisions. These boundary anomalies will be corrected through an omnibus amendment to the GBRS.

### Land tenure

Land in the park consists of Crown reserves administered under the *Land Administration Act 1997* with Management Orders granted to several State government agencies and local government authorities. Crown reserves may also be vested under other Acts (such as the CALM Act). The park also includes freehold land owned by State government agencies, local government authorities, private organisations or individuals. There are also unmanaged Crown reserves and UCL. Existing land tenure is shown in Appendix 2 and on Maps 2a and 2b.

Appendix 2 describes the intended future vesting and management of most parts of the park that are managed by State government agencies or local



Parts of the park within Eaton Foreshore and Pelican Point (left), Alexander Island (centre) and Clifton Community Reserve and Point Douro (right) adjoin the lower Collie River as it enters the Leschenault Estuary. Photo – Shem Bisluk/DBCA

government authorities. There are some lands in the park where identification of future management is dependent on future land-use planning processes and assessments.

The tenure arrangements for Leschenault Peninsula Conservation Park (Class A reserve 42470), Morangarel Nature Reserve (Class A reserve 38393), Mangrove Cove reserve (Class C reserve 5275) and Class C reserve 40564 that are already vested in the Conservation and Parks Commission and managed by DBCA will not change. Although only a portion of Mangrove Cove reserve is within the regional park boundaries, this management plan applies to and provides a statutory management framework for the remainder of this reserve that is managed by DBCA.

Lands to be vested in the Conservation and Parks Commission will be afforded the purpose of 'conservation park' or 'conservation of flora and fauna' (for a nature reserve), depending on their natural values, connections to other DBCA-managed lands and current use.

Lands to be vested in the local government authorities will be afforded an appropriate purpose to reflect current or future approved uses.

### Crown reserves, unallocated Crown land and Crown owned freehold

Some Crown reserves, UCL and freehold lands managed by agencies and local governments will transfer to the Conservation and Parks Commission for management by DBCA as conservation reserves<sup>5</sup>, particularly several areas of the park south of Bunbury and adjoining the Collie and Brunswick Rivers. However, many lands will remain managed by agencies and local governments. In these cases, management will be in accordance with this plan.

Land reserved for utilities or services, such as pumping infrastructure managed by the Water Corporation, will retain its existing reserve purpose and tenure arrangements. Access for maintenance purposes will not be restricted.

<sup>5</sup> Conservation reserves are Crown reserves that are protected for conservation under sections 5 and 6 of the CALM Act and are generally nature reserves, national parks or conservation parks.

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Lots 3 and 4 on Plan 3957 on the Leschenault Peninsula (between the two parcels of the Leschenault Peninsula Conservation Park) are Crown freehold managed by DBCA and have been identified in the *Forest Management Plan 2014-23* (CCWA 2013) and the *Swan Coastal Plain South Management Plan 2016* (DPaW 2016) for addition to the Leschenault Peninsula Conservation Park.

### Road reserves

Gazetted road reserves managed by local government authorities and managing agencies occur throughout the park, some of which contain roads or tracks that enable access to the park. Liaison will occur between local government authorities, DBCA, WAPC, Main Roads WA and the Department of Planning, Lands and Heritage (DPLH) to close road reserves or portions of road reserves within the park that are considered unnecessary. Closed road reserves will be amalgamated into adjoining reserves within the park.

The unused road reserve on the Leschenault Peninsula that bisects lots 3 and 4 on Plan 3957 should be added to the Leschenault Peninsula Conservation Park, following the addition of Lots 3 and 4 to the conservation park (see above).

### Private property

Privately-owned freehold land occurs within the park along the Preston River, in the Tuart Brook/Five Mile Brook area, Buffalo Road area and in pockets along the Brunswick and Collie rivers to the mouth of the Collie River and the Leschenault Estuary.

Private property within the regional park is reserved ROS in the GBRS and may be acquired by the WAPC or ceded to the State of WA as a planning condition on subdivision. This plan does not propose any changes to the management of privately-owned freehold land held by organisations, authorities or individuals within the park, although private landowners may decide to consider the content and principles set out in this plan as part of managing their land. However, if land is acquired by the WAPC or ceded to the State of WA, it will be vested in the Conservation and Parks Commission or the relevant local government, and management will be in accordance with this plan.

Access by park visitors is not available to areas of private property owned by organisations or individuals in the park.

### Inclusion of other lands into the park

Criteria for determining potential additions to the regional park include that an area of land:

- consolidates the regional park and has a low perimeter to area ratio
- is identified as having regionally significant values
- is reserved for ROS in the GBRS
- provides a physical link to another area of the park
- provides a park boundary that helps in the efficient and effective management of the park.

Land acquisition proposals may depend on several factors including relevant State and local government agency use and agreement, native title resolution, Statewide priorities, the values/assets of the land, owner willingness to sell, land prices and available funding, and that negotiations and land transfers can take considerable time and resources to complete.

### Management objective: To protect park values through progressing formal land tenure arrangements consistent with the purpose of the park.

Management strategies

- 1. Adopt the boundary of the park as shown on Maps 2a and 2b. The boundary will be modified should additional lands be included in the park or ROS boundaries amended. (WAPC, DPLH, DBCA, CoB, SoC, SoD, SoH)<sup>6</sup>
- 2. Ensure that management is consistent with the land category, Management Order, vesting, purpose and classification of reserves. (WAPC, DPLH, DBCA, CoB, SoC, SoD, SoH)
- 3. Liaise with DPLH to create or transfer reserves for vesting in the relevant managing agency using Appendix 2 as a guide. (DBCA, CoB, SoD, SoH, DoC, DPLH)
- 4. Liaise with local government authorities, WAPC and DPLH to close gazetted road reserves within the park that are considered unnecessary. (DBCA)

<sup>6</sup> Each management strategy in the plan includes management responsibility, with principal or lead responsible bodies shown in **bold**.

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# 5. Park management

Parts of the regional park are managed by different managing agencies (Appendix 2, Maps 2a and 2b), and ongoing management of the park will be in accordance with the strategies outlined in this plan. DBCA is responsible for managing areas of the park vested in the Conservation and Parks Commission and for the overall coordination of management through the preparation of this plan. The local government authorities, Water Corporation, DWER, DoC and WAPC will manage areas of the park vested in or held by these entities, in accordance with the strategies outlined in this plan. Changes to the GBRS and acquisition of private land within the park, in coordination with DBCA, will remain the responsibility of the WAPC.



View eastwards from The Cut towards the Collie River mouth, Pelican Point, Point Douro and Bar and Alexander islands. Photo – Shem Bisluk/DBCA

Community engagement and support from managing agencies is needed for this plan to be implemented efficiently and effectively. Management decisions will involve input and negotiation between the managing agencies. DBCA will refer strategic and policy issues to the Conservation and Parks Commission for consideration as needed. Where appropriate, working parties comprising representatives from DBCA, local government and other relevant agencies will be established to facilitate the preparation of detailed subsidiary plans for the park and ongoing communication on operational matters.

Local Noongar involvement will be important to facilitate maintenance of management practices and customary activities. There is a strong interest by Noongar people to be involved in the ongoing planning and management of DBCA-managed lands and to conduct customary activities on DBCA-managed lands. By working with Noongar people to care for the land, there will be great benefits for the preservation of heritage, conservation of the environment and cross-cultural awareness.

### Land-use planning

#### Within the park

Under the GBRS, approval of the WAPC is needed for certain developments on land reserved for ROS (WAPC 2008).

Proposed operations and disturbance activities<sup>7</sup> within the park should be assessed for their impact on park values but the specific requirements for assessment and/or approval will depend on the managing agency, the relevant legislation that might apply and/or the type of proposed activity. Proposed disturbance activities (excluding mining) on all DBCA-managed lands will be assessed using DBCA's online Disturbance Approval System.

### Adjacent to the park

Many impacts and management issues affecting the park result from surrounding land uses and activities. Planning for areas surrounding the park is determined at the State and local level. At the State level, the WAPC is responsible for administering the GBRS. At the local level, local planning schemes provide detailed land-use planning zones, reservations and development provisions for each local government in the region.

Structure plans are endorsed by the WAPC under the Planning and Development (Local Planning Scheme) Regulations 2015 to guide and provide a framework for future land use and subdivision. There are several existing structure plans that apply to portions of the park, such as at Five Mile Brook and the eastern side of the Brunswick, Collie and Preston Rivers (Kingston, Treendale, South Treendale, Millbridge and South Moorlands), which guide land use and subdivision within and adjacent to the park.

<sup>&</sup>lt;sup>7</sup> Disturbance activities are those activities that may disturb or otherwise impact on vegetation or the environment within the park.

### Interim management arrangements

Prior to the transfer of relevant lands to the appropriate agencies, there is a need to develop and implement interim management arrangements between managing agencies. DBCA will coordinate the collaborative interim management of regional park lands identified to be vested in the Conservation and Parks Commission through the preparation of this plan and Memorandums of Understanding (MOUs).

The management of private land held by organisations or individuals is the responsibility of the owner. Any interim management arrangements that may be considered for private lands would be voluntary.

### Park management zones

Management zones are a land-use planning framework for protecting the park and minimising existing and potential conflicts between uses and activities by identifying areas of conservation, recreation and other values, and determining appropriate uses, facilities and activities. Management zones provide broad guidance on public use and management activities that are appropriate in certain areas of the park and indicate which management objectives have priority in each area.

The proposed management zones for the regional park are described in Appendix 3 and represented on Maps 4a and 4b. Management zones also relate to the degree of visitor and recreational use, and zones have been integrated with the recreation planning of sites, facilities and activities through visitor management settings (Section 18, Appendix 3). Proposed management zones may change as tenure and management arrangements are finalised/agreed for specific areas of the park. The management zones and recreation settings framework does not affect the tenure arrangements or management of the service and utility reserves in the park.

The management zones and recreation settings framework does not direct the management of privately-owned freehold land held by individuals or organisations in the park. However, where the land is acquired by the WAPC or ceded to the State of WA, management will be in accordance with the plan's park management zones.

# Management objective: To ensure the appropriate, efficient and effective management of the park.

- 1. Prepare MOUs or management agreements for interim park management for areas controlled by State or local government authorities or private landholders as needed. (all agencies)
- 2. Ensure that park management is as consistent as possible with the management zones in Appendix 3 and Maps 4a and 4b. (**DBCA, CoB, SoC, SoD, SoH, DoC, WC, DWER**)
- 3. Where appropriate, request conditions on planning proposals, developments and operations to protect and enhance the values of the park. (DBCA, CoB, SoC, SoD, SoH, DWER, WC, DoC, WAPC)
- 4. Assess all planned operations and disturbance/development activities within the park that have the potential to impact park values. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, WAPC)

# Natural environment

# 6. Geology, landforms and soils

The southern area of the park extends over a 7km contiguous corridor stretching from the coast in the west to Preston River in the east. The northern area of the park encompasses a west-east corridor up to 8km wide, extending from the coast, around the Leschenault Estuary, eastwards along the lower Collie River and northwards along Brunswick River. There are also four islands within the park: Snake and Alexander islands in the Collie River, Bar Island located at the mouth of the Collie River, and Anglesea Island in the Leschenault Inlet.

The park is in the low-lying Swan Coastal Plain Bioregion (Section 8), which is characterised by a generally subdued topography formed from erosional and depositional processes relating to changes in sea levels during the Pleistocene and Holocene periods. These processes resulted in the accumulation of dunal and shoreline deposits (consisting of sands, limestones, silts, clays and gravels of marine, estuarine, river [alluvial] and wind-blown [aeolian] origin) arranged in a sequence of four main geomorphological systems or landforms parallel to the coastline. Each geomorphological system has distinctive geology, topography, drainage, soils and vegetation. These properties formed the foundation for mapping the systems' soil associations (or units) (Churchward and McArthur 1980).



Bar Island at the entrance to the Collie River between Pelican Point and Point Douro. In the background is the Preston River mouth (left) and The Cut (right). Photo – Shem Bisluk/DBCA

### Geomorphology and soils

The four main geomorphological systems of decreasing age (east to west) are: Pinjarra Plain, Bassendean Dune System, Spearwood Dune System and Quindalup Dune System (McArthur and Bettenay 1974). Estuarine deposits of Pleistocene age also occur (Vasse and Yoongarillup formations). The geomorphology and soil associations (or units) for the park have been described by several sources including McArthur and Bettenay (1974), Churchward and McArthur (1980), V & C Semeniuk Research Group (2009) and the park's establishment plans (WAPC 2011 and 2017a).

#### Pinjarra Plain

The Pinjarra Plain or Guildford formation is characterised by alluvial sediments and occurs on the eastern side of the coastal plain in the northern area of the park. The riverine deposits are associated with the Pinjarra Plain and the beds and floodplains of the rivers are distinct from the surrounding land and consist mainly of red earths and duplex soils and loams.

#### Bassendean dunes

The Bassendean Dune System is the Pleistocene desert dunes of quartz sand, or an accumulation of beach sands along an ancient shoreline to the west of the Darling Range. It is the first (most easterly) and oldest of the three aeolian dune systems and varies in thickness from a few centimetres to several metres. In the northern area of the park the Bassendean sands (Bassendean unit) are represented in small areas inland adjacent to the rivers, and in the southern area occur throughout most of Manea and Loughton parks.

### Spearwood dunes

The Spearwood Dune System is the Pleistocene coastal dunes (now leached yellow sands and limestone). The Spearwood sands (also known as Karrakatta sands) are evidence of the dominance of the aeolian over the alluvial influence. In College Grove, the Spearwood Dunes overlie Bassendean Dunes. Their interfaces on the east and west side of the ridge are marked by the vegetation change from tuart (*Eucalyptus gomphocephala*) and peppermint (*Agonis flexuosa*) to slender banksia (*Banksia attenuata*) woodland. The western area extends from Parade Road to its interface with the younger Quindalup Dunes. There are two ridges of Spearwood, one in Usher (18m Australian Height Datum [AHD]) and one in the Shearwater area (26m AHD). From there it slopes gradually to the swale at the base of the steep lee slope of the Quindalup Dunes. In this swale two small wetlands have formed an unusual ecological niche. Limestone occurs on the two ridges and in the southern part of the two wetlands, where it seems to have formed a floor that continues under the Quindalup Dune System toward the beach.

#### Quindalup dunes

The Quindalup Dune System (also known as the Safety Bay Sands) is the Holocene coastal dunes and make up the coastal area of the park. The dunal area in the Leschenault Peninsula acts as a barrier protecting the Leschenault Estuary from the ocean. The Quindalup unit is mainly cream and white medium-grained calcareous sand, which becomes increasingly unconsolidated and mobile toward the coast. An example is the large blow-out (locally known as the 'Sand Bowl') in the south-west corner of the park near Maidens Reserve on land owned by the Water Corporation.

#### Estuarine deposits

The Vasse formation is located at the northern extremity of the Leschenault Estuary at or near sea level, and consists of estuaries, swampy depressions and poorly drained flats. The soils are mixed layers of recent estuarine deposits and occur as layers of clay, shells, marine algae and coarse calcareous sands (Vasse unit). The Yoongarillup Plain, which occurs between Mandurah and Bunbury, is formed from fossiliferous marine and estuarine limestones in the Tamala Limestone overlain by a relatively thin layer of quartz sand (Yoongarillup unit) – it is a strip of low, undulating ground between the Spearwood and Quindalup dune systems (Semeniuk 1990, Gozzard 2007), with minor ridges, swales and depressions with swamps or lakes. The plain also includes the Hay Park playing fields and remnant vegetation within the park. The Hay Park remnant bushland contains black and grey calcareous soils. Salinity in southern parts of Bunbury is affecting existing vegetation and supporting samphire.

### Acid sulfate soils

Acid sulfate soils (ASS) are naturally occurring soils, sediments or organic substrates commonly occurring in lowlying wetlands, swamps, estuaries, salt marshes and tidal flats. These soils contain iron sulfide minerals mainly as the mineral pyrite or their oxidation products. In an undisturbed state, ASS are typically waterlogged or exist in highly anaerobic conditions, are benign, not acidic and often go unnoticed and cause no problems. However, if the soils are disturbed, drained, excavated or exposed to air by a lowering of the water table, the sulfides oxidise and produce sulphuric acid, iron precipitates and concentrations of dissolved heavy metals such as aluminium, iron, cadmium and arsenic in the soil. These highly acidic soils and water can have a variety of harmful impacts to the environment (including being toxic to many native plants and animals) and infrastructure. <u>Acid sulfate soil risk</u> <u>mapping</u> covers the park.

### Management objective: To protect and conserve geological features, landforms and soils.

- 1. Identify and protect the important geological, landform and soil features vulnerable to erosion and other environmental damage through the planning and assessment of sites and management operations, managing access and the provision of fencing, signs and information, where relevant and appropriate. (DBCA, CoB, SoD, SoH, WC, DoC)
- 2. Rehabilitate coastal areas to stabilise dunes as needed. (DBCA, CoB)
- 3. Where dewatering or the excavation of more than 100m<sup>3</sup> of soil is proposed during activities in the park, determine the ASS risk classification for the site in question and if deemed required, undertake ASS investigations, management planning and works in accordance with DPLH and DWER policy. (DBCA, CoB, SoD, SoH, WC, DoC, DWER, WAPC)

# 7. Hydrology

### Surface water

The regional park transitions from the coastal (marine) formations to estuarine and to freshwater river landscapes further inland. The Leschenault Estuary is the receiving body for most of the surface water within and adjacent to the park that drains through the Preston River, Brunswick River and lower Collie River catchments. It is also the receiving body for the land uses (such as agricultural and urban land uses) and activities within the almost 2,000km<sup>2</sup> Leschenault Catchment.

DBCA is responsible for managing wetlands (areas of seasonally, intermittently or permanently waterlogged or inundated land) and waterways on CALM Act lands (except wetlands that are estuary peripheral or are located within a floodplain with direct connection to a waterway, which are the responsibility of DWER), and coordinates mapping of WA's wetlands. Significant wetlands in the regional park, exclusive of the waters/waterways of the Leschenault Estuary and Inlet or the Preston, Collie and Brunswick rivers (Section 2), are listed in Table 3.

Wetland name	Park area	Management category
[Leschenault] Estuary – Peripheral –	Leschenault Peninsula C.P. & proposed	Conservation
northern and western sides (includes	additions, Leschenault Estuary Cathedral	
Cathedral Avenue wetlands and Knapps	Ave foreshore	
Channel wetland)		
Leschenault Peninsula (Estuary -	Leschenault Peninsula C.P. & proposed	Conservation
Peripheral – eastern side)	additions	
'Brunswick River' wetlands (river	Brunswick River foreshore reserves - east	Conservation
floodplain)	of Forrest Hwy	
'Brunswick River' wetlands (river	Foreshore reserves eastern and western	Conservation
floodplain/foreshore)	sides of Brunswick River - Paris Road to	
	Forrest Hwy	
'Twin Rivers/The Junction' wetlands	The Junction/Twin Rivers	Conservation
(river floodplain) 'Meadow Landing' wetlands	Maadam Landina	Conservation & Resource
Meadow Landing wetlands	Meadow Landing	Enhancement
'Millars Creek' wetland (creek foreshore)	Millars Creek	Conservation
Elbow/Eelup wetland (includes river	Eelup/Elbow wetland & south Collie	Conservation
floodplain)	River foreshore	Conservation
Collie River foreshore (river floodplain)	Pratt Road Reserve, Watson Reserve &	Conservation
	Leicester Reserve	
Egret wetland (or Australind Egret	Australind reserves – Morangarel Nature	Conservation
Swamp)	Reserve	
'Point Douro' wetlands (Estuary -	Point Douro	Conservation
Peripheral)		
'Clifton Community Reserve' wetland	Clifton Community Reserve & foreshore	Conservation
(Estuary – Peripheral)		
'Mangrove Cove' wetlands (Estuary -	Mangrove Cove	Conservation
Peripheral)		
Preston River foreshore	Preston River Link	Conservation & Resource
		Enhancement
'Loughton Park' wetland	Loughton Park	Conservation
'Manea Park' wetlands	Manea Park	Conservation
'Rifle Range' wetlands	Manea Park	Conservation & Resource
	M D I	Enhancement
Unnamed wetland	Manea Park	Conservation
'Hay Park' wetlands	Hay Park	Conservation
'Five Mile Brook' wetlands Tuart Brook/Five Mile Brook Resource Enhancement		

Table 3. Significant wetlands in the park

Egret wetland was an important breeding site for the great egret, little egret and rufous night heron in the 1980s (Jaensch *et al.* 1988). It is also one of the 100 wetlands that have been monitored under the State Salinity Strategy's *South West Wetlands Monitoring Program* (Lane *et al.* 2017). The mudflats at Point Douro and other areas around the Leschenault Estuary and Inlet provide important habitat for international migratory birds and other waterbirds to use for feeding roosting and breeding (Section 9).

#### Flooding

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Parts of the park around the Leschenault Estuary and along the Collie, Brunswick and Preston rivers and Eedles Gully lie within floodplain, floodway and/or flood fringe within the extent of a 1 in 100-year annual exceedance probability of flooding (WAPC 2017b). DWER provides advice on development applications and subdivision proposals on floodplains, local government implements floodplain management strategies through land and development controls and building regulations, and Water Corporation maintains flood mitigation works including the flood protection embankments (levee banks) along the Preston River, parts of which are in the Preston River link part of the park. Tuart Brook/Five Mile Brook is important for stormwater management and flood mitigation in South Bunbury.

#### Erosion

Active and unmanaged erosion of the riverbanks and associated sedimentation has the potential to adversely impact the ecological health of waterways or infrastructure in the regional park. Waterways can become shallower with sediment build-up, which can increase the flooding risk (DoW 2010). Transported sediments can also contain significant loads of nutrients, heavy metals and organochlorines, which impact the water quality of the waterways and estuary (DoW 2010).

The coastline<sup>8</sup> within the park will also be exposed to predicted future increases in storms as a result of climate change, which is likely to exacerbate coastal erosion processes.



Elbow wetland. Photo – Jonnie Cobby/DBCA

The <u>Peron Naturaliste Partnership</u>, City of Bunbury, Shires of Harvey, Dardanup and Capel and other partners are preparing a collaborative Coastal Hazard Risk Management and Adaptation Plan (CHRMAP) for the Greater Bunbury region that includes the Leschenault Inlet, Leschenault Estuary and the Preston, Collie and Brunswick rivers. This CHRMAP will provide guidance on the management of inundation and erosion risk including potential treatment options for parts of the park. A Collie River Masterplan is being facilitated by the Shires of Dardanup and Harvey in consultation with City of Bunbury, DWER and other key stakeholders, which will identify and address the erosion issues facing the Collie River.

### Groundwater

The groundwater aquifers generally underlying the regional park (from the surface) are the Superficial, Leederville and Yarragadee aquifers (DoW 2009a). The Superficial aquifer is an unconfined aquifer (generally water table groundwater) consisting of mainly sands of the Bassendean Sand, Tamala Limestone and Safety Bay Sand formations that is up to 20m thick and is recharged by direct infiltration of rainfall (DoW 2008a, DoW 2009a).

The Leederville aquifer is a confined aquifer, with the formation that acts to confine the deeper Yarragadee aquifer. The Leederville aquifer is recharged by direct infiltration of rainfall on the Blackwood Plateau, where the formation outcrops (DoW 2008a, DoW 2009a).

The Yarragadee aquifer is generally confined except where it outcrops in areas of the Blackwood Plateau and in an area south of Bunbury (near the Bunbury Water Reserve) where the Leederville Formation and the Bunbury Basalt are absent. The Yarragadee aquifer is recharged by direct infiltration of rainfall where the formation outcrops on the Blackwood Plateau (DoW 2008a, DoW 2009a). This recharge is considered to be in the Nannup area. Some recharge also occurs through the superficial formations between Bunbury and Capel.

The park is mostly in the proclaimed Bunbury Groundwater Area, with the northern tip of the park (north of the Leschenault Peninsula) in the proclaimed South West Coastal Groundwater Area (DoW 2009a). A monitoring program undertaken by DWER supports the *South West Groundwater Areas Allocation Plan* so that water resources can be managed to maintain their integrity for consumptive use while protecting the social, cultural and natural values that are dependent on the resource (DoW 2009a). Groundwater level trends for the Yarragadee Aquifer show declines of up to 2m during the last 10 years (DoW 2009a). Reductions in water levels in the aquifer becomes most apparent at the surface in areas where the aquifer is shallow or overlain by the Superficial aquifer

<sup>&</sup>lt;sup>8</sup> The coastline is the seaward extent of ephemeral vegetation on an accreting/stable coast (DoT 2018a).

(such as in southern areas of the park) (DoW 2009a). Therefore, this area of the regional park (such as Hay Park) is particularly susceptible to the effects of Yarragadee abstraction (Del Borrello 2008).

#### Groundwater-dependent ecosystems

Surface water features such as wetland and river systems may be strongly connected to, and dependent on, groundwater, and in the regional park these areas include the Brunswick River and lower Collie River floodplains (Hyde 2006) and Hay Park and Manea Park wetlands.

The Hay Park and Manea Park wetlands have been identified as areas that contain groundwater-dependent ecosystems and have determined ecological water requirements (DoW 2008b, Del Borrello 2008, Loomes *et al.* 2008). Management objectives for these areas are to:

- protect TECs and rare and priority native plant species
- maintain the structure and distribution of wetland vegetation
- maintain species richness and diversity
- prevent or reduce weed invasion
- maintain and/or enhance canopy condition (Loomes *et al.* 2008).

Threatened native plant and animal species, TECs, wetlands and watercourses and associated bed and banks may be linked to groundwater-dependent ecosystems and considered in managing groundwater abstraction (DoW 2009b). If a licence application to take water near these sites is submitted, an assessment to determine any adverse effects to these sites may be needed (DoW 2009b).

#### Salinity

Sea water intrusion into groundwater is an issue in the southern area of the regional park. Saline intrusion is caused by over-abstraction of groundwater, with sea water being drawn eastwards into coastal groundwater aquifers. Water levels in the Yarragadee aquifer in the East Bunbury area have declined below sea level, which increases the likelihood of the sea water interfaces moving inland (DoW 2010). This sea water intrusion can impact wetland ecosystems, groundwater-dependent ecosystems and users of the resource.

The risk of intrusion of the sea water interface around the Bunbury area is known to be high (DoW 2009a). The City of Bunbury receives potable water from shallow groundwater bores close to the coast that draw on the Yarragadee aquifer (DoW 2010). The bores are subject to the effects of inland movement of the saltwater interface.

Management objective: To protect and conserve hydrological values and processes, particularly wetlands, and minimise the impacts of altered hydrology on park values.

Management strategies

- 1. Identify and protect hydrological values vulnerable to environmental damage, where relevant and appropriate. (DBCA, CoB, SoD, SoH, WC, DoC, DWER)
- 2. Investigate and implement riverbank stabilisation and coastal hazard management techniques and approaches to manage and reduce impacts to infrastructure and the natural environment, from sea level rise and associated erosive forces, where relevant and appropriate. (DBCA, CoB, SoD, SoH, DWER)

# 8. Native plants and vegetation

### Vegetation

The regional park is in the Swan Coastal Plain region of the <u>Interim Biogeographic Regionalisation for Australia</u>, which corresponds to Beard's (1980) 'Drummond' subdistrict within the 'Darling Botanical District' of the Southwestern Botanical Province of WA. Of the 38 percent of pre-European vegetation remaining in the Swan Coastal Plain region, 10.2 percent of current extent is protected within conservation reserves.

Seven vegetation complexes (Heddle *et.al.* 1980) occur in the park, all of which are poorly reserved and four are extensively cleared and considered to be vulnerable (Table 4).

Vegetation complex	Significance criteria <sup>1</sup>	A. Pre- 1750 extent (ha)	B. Current extent (ha)	C. % remains	D. Pre-1750 extent in reserves <sup>2</sup> (ha)	E. Current extent in reserves (ha)	F. % current extent protected as proportion of pre-1750 extent	Area in the park (ha)
Bassendean	1, 3	87,476	23,533	26.9	1,849	1,624	1.86	110
Complex - Central & South								
Karrakatta Complex - Central & South	1, 3	53,081	12,465	23.48	2,124	2,054	3.87	427
Quindalup Complex	1	54,574	32,983	60.44	4,817	4,566	8.37	1,295
Southern River Complex	1, 3	58,782	10,828	18.42	947	691	1.18	361
Swan Complex	1,3	15,194	2,056	13.53	97	56	0.37	332
Vasse Complex	1	15,692	4,929	31.41	2,483	2,052	13.08	194
Yoongarillup Complex	1	27,978	9,946	35.55	4,206	3,676	13.14	274

#### Table 4. Vegetation complexes

<sup>1</sup> Significance criteria: 1 = Poorly reserved <15% of pre-1750 extent in conservation reserve system (column F), 3 = Extensively cleared <30% of pre-1750 extent remaining is the threshold level below which species loss appears to accelerate exponentially at an ecosystem level and can therefore be considered vulnerable (column C).

 $^{2}$  reserves = conservation reserves.

Nineteen vegetation types have been mapped for the park (below, Maps 3a and 3b), which have been produced from vegetation attributes at a 1:50,000 scale that have been applied to the DAFWA (2007) soil landscape mapping from limited field inspections. There are several areas in the park that are cleared of native vegetation.

### Quindalup dunes - Quindalup complex

The Quindalup dune vegetation of the park is the southern-most substantial area of this landform vegetation remaining uncleared and in public vesting on the Swan Coastal Plain. Distinct vegetation occurs within exposed coastal foredunes, consolidated dunes and dune swales.

### Exposed coastal foredunes

Exposed coastal foredunes includes parabolic dunes with blow-outs and exposed coastal heath. The vegetation includes coloniser species on foredunes such as hairy spinifex (*Spinifex hirsutus*), beach spinifex (*S. longifolius*), sea rocket (*Cakile maritima*), sea spinach (*Tetragonia decumbens*) and *Carpobrotus* species, which intergrade into species including coastal daisybush (*Olearia axillaris*), rigid wattle (*Acacia cochlearis*), dysentery bush (*Alyxia buxifolia*), *Acanthocarpos preissii*, thick-leaved fan-flower (*Scaevola crassifolia*), coast sword-sedge (*Lepidosperma gladiatum*), berry saltbush (*Rhagodia baccata*) and stunted peppermint.

#### **Consolidated dunes**

consolidated dune The vegetation has peppermint and tuart trees. In exposed locations, mallee peppermint is dominant occasionally with mallee tuart. Both species become tall trees and co-dominant in sheltered areas. The dominant understory species include coastal daisybush, Spyridium globulosum, coast hop-bush (Dodonaea aptera), rigid wattle, southern diplolaena (Diplolaena dampiera), Exocarpos sparteus, Jacksonis furcellata, Acanthocarpos preissii, snakebush (Hemiandra pungens), thickleaved fan-flower, panjang (Acacia lasiocarpa) over herbs, sedges and grasses such as Conostylis aculeata, large flowered bogrush (Schoenus grandiflorus), Austrostipa flavescens, Lepidosperma squamatum and Bromus arenarius.



Quindalup dune vegetation in Maidens Reserve. Photo – Andrew Webb/DBCA

#### Quindalup dune swales damplands

Keighery *et al.* (2002a) describes how some interdunal swales have developed into damplands due to organic-rich sands and impeded drainage. These features can support species more typically associated with wetlands such as swamp banksia (*Banksia littoralis*), orange wattle (*Acacia saligna*), bare twigrush (*Baumea juncea*) and kidney weed (*Dichondra repens*). DAFWA (2007) maps one of these features for the regional park, although most of this feature does not have dampland features.

The Quindalup dune vegetation of the park supports several range-end populations of Swan Coastal Plain species. The Quindalup dunes within the park is one of only two locations in WA where tuart occurs as a mallee form and is the only known location where tuart occurs in contiguous woodland and mallee vegetation units (Keighery *et al.* 2002b).

#### Spearwood dunes - Karrakatta complex central and south

The Spearwood landform of the park includes wetland and upland vegetation.

#### Wetland vegetation – Quindalup/Spearwood dune interface sumplands and lakes

Seasonally wet swales occur at the junction of the Quindalup and Spearwood dunes. Two examples of this vegetation type are known for the park and are associated with lime marl soils and near permanent moisture. They are dominated by species associated with moist soils such as orange wattle, *Chorizema diversifolium, Logania vaginalis, Adriana quadripetala,* swamp banksia, *Leucopogon australis,* coast saw-sedge (*Gahnia trifida*), *Ficinia nodosa, Myoporum caprarioides,* bare twigrush and *Centella asiatica.* An area of near-permanent surface water in the largest of these swales supports *Schoenoplectus pungens,* which in the Bunbury area is a rarely encountered sedge only known from a handful of otherwise degraded sites.

#### Wetland vegetation - calcareous silts

This is an ancient area of marine/estuarine deposition with varying depths of organic-rich soils over underlying limestone. The lowest lying parts of this area have calcareous silt soils and are dominated by Melaleuca species such as mohan (*M. viminea*), swamp paperbark (*M. rhaphiophylla*) and banbar (*M. teretifolia*) over sedges such as coast saw-sedge and pithy sword-sedge (*Lepidosperma longitudinale*) and herbs including beaded samphire (*Salicornia quinqueflora*), creeping brookweed (*Samolus repens*) and the grass *Sporobolus virginicus*.

The remainder of the area has slight rises of alluvial/organic-rich soils overlying the limestone and has a diverse, mainly wetland vegetation but also some small upland areas. Overstory species can include flooded gum (*Eucalyptus rudis*), swamp paperbark, moonah (*M. preissiana*), swamp banksia and in the dryer areas tuart and

marri (*Corymbia calophylla*). The understory species of these rises is diverse and varied. The critically endangered grass *Austrostipa jacobsiana* is known from these vegetation types.

# Upland vegetation – Spearwood tuart forest over peppermint

This form of upland Spearwood vegetation is only in the Shearwater Tuart Forest where it occurs at the base of the Quindalup dune, surrounds the dune interface swales and extends over the Mosedale dune to about Parade Road. This forest is dominated by relatively dense tuart over peppermint and often slender banksia. The understory is dominated by species of near-coastal locations, such as berry saltbush, *Spyridium globulosum*, southern diplolaena, *Eremophila glabra*, coast sword-sedge and *Acanthocarpos preissii*. The soils are yellow spearwood sands with outcropping limestone on the crest of the Mosedale dune.

# Upland vegetation – Spearwood jarrah, banksia, marri woodland

This type of Spearwood vegetation within the park is found at Leschenault (north of the Bunbury golf course) and in the Shearwater Tuart Forest east of Parade Road extending to the top of the College Grove dune. Within the Shearwater Tuart Forest, the change-over of these upland vegetation types at



Mature tuart tree in Shearwater Tuart Forest. Photo – Paul Roberts/DBCA

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Parade Road is noticeable. Tuart becomes scattered and the secondary tree layer becomes dominated by jarrah (*Eucalyptus marginata*), slender banksia and marri. Peppermint is rarely dominant, and the understory very rarely includes near coastal species. The understory is typically dominated by *Hibbertia hibbertioides*, stalked guinea flower (*Hibbertia racemosa*), *Bossiaea eriocarpa* and woody pear (*Xylomelum occidentale*). The Leschenault occurrence of this vegetation lacks tuart. Both the Leschenault and the Shearwater examples of this vegetation support several understory species typical of the Spearwood landform that distinguishes this banksia vegetation from that of the Bassendean Dune landform. These species include large flowered bogrush, *Daviesia divaricata, Synaphea spinulosa*, sand lily (*Corynotheca micrantha*), *Orthrozanthus laxus* and *Lasiopetalum membranaceum* (which is Priority 3 listed).

### Bassendean dunes – Bassendean complex central and south/Southern River

The Bassendean landform within the park is only found in Manea Park, Loughton Park and Wardandi Flora Reserve and adjacent Crown reserves. It is predominantly the '*Southern River Complex*' (Heddle *et.al.* 1980), which is where Bassendean sands overlie Pinjarra Plain alluvium. In areas, the alluvial soil can be exposed or very close to the surface and the vegetation in these situations may be representative of the Pinjarra Plain landform, despite the entire area being mapped as the Bassendean landform.

### Upland vegetation - banksia and/or marri woodlands



Banksia woodland in Manea Park. Photo – Paul Roberts/DBCA

The elevated rises of Bassendean sand are dominated by a slender banksia and jarrah low open forest, often with holly-leaved banksia (*Banksia ilicifolia*). Less elevated rises and lower slopes near wetlands where subsoil moisture influences the vegetation have marri as a co-dominant. Understory species of these vegetation types include yellow buttercups (*Hibbertia hypericoides*), stalked guinea flower, *Bossiaea eriocarpa*, *Eriostemon spicatum*, *Phyllanthus calycinus*, *Melaleuca thymoides*, *Lyginea barbata*, *Hypolaena exsulca*, *Phlebocarya ciliata*, *P. filiformis* and *Dasypogon bromelifolius*. Populations of several priority-listed species are found in this vegetation.

### Wetland vegetation - dampland wetlands

Dampland wetlands are those that have waterlogged sandy soils in winter/spring but rarely experience surface inundation. The vegetation is dominated by a moonah low woodland occasionally with holly-leaved banksia and Christmas tree or *moodja* (Nuytsia floribunda) over an understory including Kunzea glabrescens, Hypocalymma angustifolia, Pericalymma elliptica, Adenanthos obovatus, Euchilopsis linearis, grass tree or balga (Xanthorrhoea preissii), Dasypogon bromeliifolius, Phlebocarya ciliata, Baxteria australis, Anarthria prolifera and Hypolaena exsulca. The priority-listed Acacia flageliformis occurs in these wetlands.

#### Wetland vegetation - seasonally inundated wetlands

These wetlands are poorly drained and seasonally inundated. They are characterised by organic-rich Bassendean sands impeding drainage and/or have impeded drainage because of underlying alluvial soils. Several different types of these wetlands are within Manea Park and Loughton Park and they are generally dominated by moonah, swamp paperbark, occasionally with mohan over shrubs such as variable-leaved hakea (*Hakea varia*), *Kunzea recurva*, grey honeymyrtle (*Melaleuca incana*), west-coast astartea (*Astartea affinis*), *Pimelea lanata*, orange stars (*Hibbertia stellaris*), *Eutaxia virgata* and the sedges bare twigrush, *Cyathochaeta avenacea*, pithy sword-sedge, *Meeboldina roycei* and occasionally coast saw-sedge. The vulnerable tall donkey orchid (*Diuris drummondii*) and the endangered grass *Austrostipa bronwenea* occur in these wetlands.

#### Wetland vegetation - Pinjarra Plain wetlands

While not mapped as the Pinjarra Plain landform, several wetlands within the park have alluvial soils and support vegetation typical of the Pinjarra Plain landform. These wetlands are only in Manea Park and most of them have been historically cleared for agriculture. Those that remain are dominated by mohan, swamp paperbark and robin redbreast bush (*Melaleuca lateritia*) over variable-leaved hakea, *Chaetanthus aristatus*, coast saw-sedge, *Meeboldina* species and a diverse range of annually renewed herbs. Several priority-listed annually renewed herbs

are within these wetlands such as floating bog-rush (*Schoenus natans*), *Blennospora doliformis*, jumping jacks (*Stylidium longitubum*), *Angianthus drummondii* and stalked water ribbons (*Aponogeton hexapetalus*).

#### Estuarine

### Low-lying coastal saltmarsh

Fringing the Leschenault Estuary and on Anglesea Island is a mainly seasonally and tidally inundated area supporting a closed herbland of beaded samphire. Other herbaceous dominants include shrubby samphire (*Tecticornia halocnemoides*), *T. indica, Suaeda australis,* creeping brookweed, *Frankenia pauciflora* and *Sporobolus virginicus.* Overstory species are rare but can include swamp sheoak (*Casuarina obesa*) and swamp paperbark, and in places particularly at Anglesea Island and Mangrove Cove the white mangrove (*Avicennia marina*) is dominant. The Priority 1 grass *Puccinellia vassica* is centred on this vegetation and the park is the only area where this species is still known to occur.

#### Slight rise coastal saltmarsh

This vegetation type is within the seasonally and tidally inundated areas of the Leschenault Estuary and is found on slight rises that intermingle with and fringe the 'low-lying coastal saltmarsh' vegetation type. The vegetation is generally dominated by the same herbaceous species as found in the 'low-lying coastal saltmarsh' but will also include sedges such as sea rush (*Juncus krausii*), knotted club rush (*Ficinia nodosa*) and coast saw-sedge. This vegetation generally has an overstory that is often saltwater paperbark (*Melaleuca cuticularis*), swamp paperbark, mohan, swamp sheoak and sometimes flooded gum.

#### Near estuarine wetlands

This seasonally inundated wetland vegetation is very comparable to vegetation of 'slight rise coastal saltmarsh' vegetation type but differs in that it appears to be separated from tidal inundation.

#### Riverine

#### **Riverine vegetation**

Riverine vegetation includes all the river channels and associated pools of the park. River fringing trees will include marri, flooded gum, swamp paperbark, peppermint and often swamp sheoak.

The lower reaches of the Collie and Brunswick Rivers have a saline influence and swamp paperbark, swamp sheoak and flooded gum are the main trees over an understory that is generally a closed sedgeland of species such as pithy sword-sedge, sea rush and coast saw-sedge, often with beaded samphire and creeping brookweed.

Outside of the saline influence, swamp sheoak is rare and the understory is often degraded. Where present, the understory may include west-coast astartea, *Taxandria linearifolia*, wonnich (*Callistachys lanceolata*), grey honeymyrtle, robin redbreast bush and bracken (*Pteridium esculentum*). Sedges in these areas can include *Lepidosperma tetraquetrum*, spreading sword-sedge (*Lepidosperma effusum*), *Baumea rubiginosa*, *B. preissii*, sheath twigrush (*Baumea vaginalis*), bare twigrush (*Baumea juncea*), marsh club-rush (*Bolboschoenus caldwellii*) and *Juncus* and *Carex* species.

Particularly in the upper fresher reaches of the rivers, understory species such as *Acacia urophylla*, lemon-scented darwinia (*Darwinia citriodora*), *Trymalium odoratissimum subsp. odoratissimum, Bolboschoenus medianus* (P1) and *Calycopeplus oligandrus* can be found. These are significant species on the Swan Coastal Plain as they typically occur on the Darling Plateau and/or they are species that are otherwise very poorly known for the Swan Coastal Plain.

### Threatened and priority ecological communities

There are eight threatened ecological communities (TECs) and seven priority ecological communities (PECs) in the park (Table 5). The 'Clay pans of the Swan Coastal Plain' TEC listed under the EPBC Act is recognised as four TECS listed under the Biodiversity Conservation Act. Two PECs are also TECs listed under the EPBC Act. Three PECs can be components of other TECs or PECs.

Table 5. Threatened and priority ecological communities in the park

Ecological community	WA	National	
		status	status
Shrublands on dry clay flats (SCP10a)	Collectively referred to as 'Clay pans of	EN	CR
Herb rich saline shrublands in clay pans (SCP07)	the Swan Coastal Plain'	VU	

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Herb rich shrublands in clay pans (SCP08)		VU	
Dense shrublands on clay flats (SCP09)		VU	
Shrublands on calcareous silts of the Swan Coastal Plain (SC	CP18)	VU	
Relictual white mangrove community (Leschenault Inlet)		P1	
Tuart (Eucalyptus gomphocephala) woodlands of the Swan Coastal Plain			CR
Banksia dominated woodlands of the Swan Coastal Plain IBRA Region			EN
Subtropical and temperate coastal saltmarsh			VU
Quindalup Eucalyptus gomphocephala and/or Agonis flexuosa woodlands (FCT30b)9			
Southern Swan Coastal Plain Eucalyptus gomphocephala - Agonis flexuosa woodlands (FCT25)			
Southern Banksia attenuata woodlands (FCT21b)		P3	

'Clay pans of the Swan Coastal Plain' communities occur where clay soils low in the landscape form an impermeable layer close to the surface, and wetlands form that rely on rainfall and local surface drainage to fill and then dry to impervious pans in summer. A suite of perennial plants that propagate by underground bulbs, tubers or corms (geophytes), and annual herbs flower sequentially as the clay pans dry out during summer, producing a floral display for more than three months. The clay pans have very high species richness, many local endemic taxa and are the most floristically diverse of the Swan Coastal Plain wetlands. In the park, these TECs are restricted to several small patches totalling about 24ha in Hay Park, Manea Park and Loughton Park.

The 'Tuart woodlands and forests of the Swan Coastal Plain' community covers about 14 percent of the park and mainly occurs in the Shearwater Tuart Forest, Maidens Reserve and Leschenault Peninsula.

The 'Banksia dominated woodlands of the Swan Coastal Plain' community covers a third of the park and more than 75 percent of the Preston River to Ocean part of the park. The community mainly occurs on well drained, low nutrient soils on sandplain landforms, particularly deep Bassendean and Spearwood sands. The community consists of (i) a distinctive canopy commonly dominated by one or more *Banksia* species, (ii) occasional emergent trees of marri, tuart and jarrah, and (iii) a highly species-rich and locally endemic shrub and herbaceous understorey.

The 'Subtropical and temperate coastal saltmarsh' community occurs around the edge of most of Leschenault Estuary (including a sizable area of the park within freehold Lots 7 and 14 on Plan 232713, north of Leschenault Peninsula Conservation Park) as well as Bar Island and Point Douro. This TEC is restricted to coastal areas under regular or intermittent tidal influence and consists mainly of salt-tolerant vegetation (halophytes) including grasses, herbs, sedges, rushes and shrubs generally to less than 0.5m in height.



Above left 'Subtropical and temperate coastal saltmarsh' threatened ecological community. Photo – Andrew Webb/DBCA

Above right 'White mangrove' priority ecological community. Photo - Andrew Webb/DBCA

The 'Shrublands on calcareous silts of the Swan Coastal Plain' community is confined to one small patch of Hay Park. The habitat of this community is classified as a dampland, as it experiences seasonal waterlogging. The community consists of open low shrubs with a rich annual flora and is described in more detail in the 'wetland vegetation – calcareous silts' vegetation type.

<sup>9</sup> Gibson *et al.* (1994) defined 30 floristic community types (FCT) within the southern Swan Coastal Plain, some of which are recognised as threatened or priority ecological communities.

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The Priority 1 'relictual white mangrove community (Leschenault Inlet)' occurs at Mangrove Cove and Anglesea Island in the Leschenault Inlet and in the upper (northern) Leschenault Estuary. In this latter area, this community occurs on high tidal flats and the steep dune shores along the eastern Leschenault peninsula, where they are supported by a salinity regime that varies from brackish to hypersaline. The community occurs as scrub, heath, shrubland, open shrubland and open heathland, with *Avicennia* forming single columnar-trunked shrubs less than 1m high and up to 3-4m high, or multi-stemmed radially branched shrubs 2-4m high. This community is the most southerly occurrence of the white mangrove in WA (Semeniuk *et al.* 2000), with the nearest white mangroves occurring more than 500km to the north at the Abrolhos Islands. The extent of mangroves in the upper Leschenault Estuary has slowly increased and may be linked to the slowly increasing sedimentation of the estuary (DoW 2007).

### Plants

There are 289 native vascular  $\tan^{10}$  and three native non-vascular taxa that have been recorded within the park. More than 200 native flowering plants have been recorded within the Leschenault Peninsula Conservation Park (CALM 1998). The most taxa-rich of the 66 native plant families are Fabaceae (legumes, peas and wattles – 31 taxa), Cyperaceae (sedges – 27 taxa), Orchidaceae (orchids – 22 taxa) and Myrtaceae (eucalypts and paperbarks – 16 taxa), which reflects similar floristic trends across the southern Swan Coastal Plain (Gibson *et al.* 1994).

### Plants of conservation significance

Native plant species of conservation significance within the park include:

• three species listed as <u>threatened</u> under section 19(1) of the Biodiversity Conservation Act: the



Caladenia speciosa is a Priority 4 orchid that occurs in the park. Photo – Andrew Webb/DBCA

- critically endangered Austrostipa jacobsiana, the endangered Austrostipa bronwenae and the vulnerable tall donkey orchid
- 21 <u>priority</u> native plant species<sup>11</sup>, including two Priority 1 species, three Priority 2 species, eight Priority 3 species and eight Priority 4 species
- regionally significant species (mainly range-end species) including coast hop-bush, snakebush, panjang, large flowered bogrush, *Calycopeplus oligandrus*, *Scaevola anchusifolia*, *Clematis linearifolia*, *Thomasia cognata*, *Guichenotia ledifolia*, *Synaphea spinulosa* and *Roepera fruticulosa*.

<u>Recovery plans</u>, <u>Wildlife Management Program No. 33</u> and other conservation plans provide guidance on the management of native plants of conservation significance in the park.

# Management objective: To conserve the habitat and populations of native plants, including populations of threatened plants and ecological communities.

- 1. Implement relevant strategies for protection and recovery of populations of threatened species and ecological communities present in the park, as required. (DBCA, CoB, SoD, SoH, WC, DoC)
- 2. Undertake habitat restoration or enhancement in degraded areas. (all management agencies)

Key performance indicator				
Performance measure	Target	Reporting		
Selected threatened plant populations and ecological community occurrences	Less than five percent decrease in the number of occurrences or populations of selected threatened plants and ecological communities from 2020 levels	Every five years, or as per recovery plans if applicable		

<sup>&</sup>lt;sup>10</sup> A plant or animal taxon is a classificatory group of any rank, such as a family, genus, species or any infraspecific category.
<sup>11</sup> Priority 1 and 2 native plant species are still considered to be under threat even though they are not listed as 'threatened' under the Biodiversity Conservation Act.

# 9. Native animals and habitats

### Native animals

There are 199 native animal taxa recorded in the park, including:

- 13 native mammal taxa from nine animal families including five bats (Vespertilionidae), two kangaroos and wallabies (Macropodidae), two possums (Phalangeridae and Pseudocheiridae), one bandicoot (Peramelidae), one dasyurid (Dasyuridae) and one rodent (Muridae)
- 131 bird taxa from 36 animal families including 12 sandpipers (Scolopacidae), 11 parrots and cockatoos (Psittacidae), eight hawks and eagles (Accipitridae), eight ducks, geese and swans (Anatidae) and eight plovers, dotterels and lapwings (Charadriidae)
- 14 reptiles from six animal families including eight skinks (Scinidae), one gecko (Gekkonidae), three frontfanged venomous snakes (Elapidae), one non-venomous snake (Boidae) and one iguanian lizard (Agamidae)
- five amphibians from two animal families including four ground-dwelling frogs (Myobatrachidae) and one burrowing frog (Limnodynastidae)
- 36 spider species have been recorded in the park including seven orb-weaving spiders (Araneidae) and six wolf spiders (Lycosidae).

### Animals of conservation significance

Native animal species of conservation significance within the park include:

- 14 species listed as <u>threatened</u> under the Biodiversity Conservation Act:
  - four critically endangered species western ringtail possum or *ngwayir* (*Pseudocheirus occidentalis*), curlew sandpiper (*Calidris ferruginea*), great knot (*Calidris tenuirostris*) and eastern curlew (*Numenius madagascariensis*)
  - five endangered species Australasian bittern (*Botaurus poiciloptilus*), red knot (*Calidris canutus*), Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), lesser sand plover (*Charadrius mongolus*)
  - five vulnerable species forest red-tailed black cockatoo or *karak/yiibi* (*Calyptorhynchus banksii naso*), greater sand plover (*Charadrius leschenaultia*), western quoll or *chuditch* (*Dasyurus geoffroii*), fairy tern (*Sternula nereis*) and Carter's freshwater mussel (*Westralunio carteri*)
- 29 migratory species listed under the Biodiversity Conservation Act
- one species of special conservation interest (conservation dependent native animals) listed under the Biodiversity Conservation Act brush-tailed phascogale or *wambenger* (*Phascogale tapoatafa wambenger*)
- two other specially protected species listed under the Biodiversity Conservation Act New Zealand fur-seal or long-nosed fur-seal (*Arctocephalus forsteri*) and peregrine falcon (*Falco peregrinus*)
- 14 species listed as threatened under the EPBC Act
- 31 species listed as 'Migratory species' under the EPBC Act
- nine species listed as threatened under the IUCN Red List of Threatened Species
- 28 migratory birds are listed under the Bonn Convention, 25 are listed under the China-Australia Migratory Bird Agreement, 26 are listed under the Japan-Australia Migratory Bird Agreement and 23 are listed under the Republic of Korea-Australia Migratory Bird Agreement
- eight priority animal species including one Priority 3 species and seven Priority 4 species.

<u>Recovery plans</u> provide guidance on the management of threatened and priority animal species in the park.

#### Habitats

Leschenault Estuary is one of the largest waterbodies and important waterbird habitats in the wetland network used by waterbirds in southern WA. Tidal flats, sandbars, bare shorelines and wet saltmarsh



The critically endangered curlew sandpiper is also listed under several migratory bird agreements. Photo – Georgina Steytler

areas are important habitats for most species, including migratory waterbird species (Raines et al. 2000).

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The critically endangered western ringtail possum. Photo – Kim Williams/DBCA

Much of the park contains suitable habitat for the critically endangered western ringtail possum, including high-quality habitat patches in the Belvidere, Shearwater Tuart Forest, Tuart Brook/Five Mile Brook, Maidens Reserve and Hay Park areas and along the Collie, Brunswick and Preston rivers (Shedley and Williams 2014).

Habitat in the park for Baudin's cockatoo, Carnaby's cockatoo and forest red-tailed black cockatoo includes eucalypt woodland that provides nesting hollows used for breeding and vegetation that provides feeding, roosting and watering habitat.

Key regional ecological linkages that are regionally significant sequences of ecological communities within and between the major landform elements include the Maidens/Preston River McLarty/Kemerton/Twin linkage, **Rivers/Preston** River/Gwindinup linkage, Collie River linkage, Brunswick River Leschenault/Eaton linkage, linkage and Leschenault/Kemerton linkage (EPA 2003). These strong ecological linkages within and to areas outside of the park are important in maintaining biodiversity and ecological systems, buffering the park from undesirable impacts and in helping to integrate the park within the broader urban and peri-urban landscapes. Opportunities should be taken to strengthen

regional ecological linkages, such as links from Manea Park to the Preston River, and DBCA will liaise with relevant agencies as needed in relation to the establishment and management of these linkages.

Management objective: To conserve the habitat and populations of native animals, including populations of threatened and other significant animal species.

- 1. Implement relevant strategies for the protection and recovery of threatened animal species and populations within the park, as required. (**DBCA**, CoB, SoD, SoH, WC, DoC)
- 2. Undertake habitat restoration or enhancement to support threatened animal populations. (DBCA)

# Management issues

# 10. Fire Management

Most of the regional park lies within either the Bunbury or Eaton-Australind gazetted fire districts, where the Department of Fire and Emergency Services (DFES) has responsibility for bushfire suppression. Outside of gazetted fire districts, DBCA is responsible for suppression on all CALM Act lands and local government authorities are responsible for suppression on remaining lands within the park. Pre-suppression on UCL and unmanaged Crown reserves within gazetted town sites is the responsibility of DFES and outside of gazetted town sites is DBCA responsibility. Pre-suppression and post-suppression on remaining lands in the park are the relevant land managers' responsibilities.

Most of the regional park contains flammable vegetation that is <u>bushfire prone</u> and able to support a bushfire or is vulnerable to bushfire attack and is subject to <u>State Planning Policy 3.7</u>, which directs how land-use planning for new developments is to address bushfire risk management in WA. Most of the park is bounded by private properties (Map 1) and there is often minimal to no physical separation (firebreaks or access) between the park vegetation and urban development making fire mitigation actions and bushfire suppression operations more complex.

Many native plants depend upon fire for regeneration and the germination of seeds. However, no single fire management regime is suited for all species and ecosystems, and some species and communities can be sensitive to fire or the effects of other treatments.

Bushfire mitigation aims to reduce the risk and severity of bushfire impacts through:

- prescribed burning and other treatments<sup>12</sup> to reduce the amount of combustible fuel
- asset protection by using appropriate building designs and materials, and setbacks
- engaging and educating communities to maintain firebreaks and create fire resilient properties.

DBCA's fire management objective is to implement appropriate fire regimes to improve ecosystems and biodiversity while balancing the need to protect lives and community assets. DBCA mitigates bushfire risk, protects lives and property and maintains biodiversity on DBCA-managed lands within the regional park through the implementation of an <u>annual burn program</u> that involves an extensive planning, consultation and approval process to ensure that all risks and priorities are considered.

Community engagement is key in reducing the impact of bushfires on private properties.

# Management objective: To protect lives, property and natural and cultural values from the impacts of bushfires.

#### Management strategies

- 1. Develop an appropriate fire management plan for the park, for inclusion in the annual indicative burn program, that identifies risks, priorities, and environmental and cultural values of the park. (**DBCA, DFES, CoB, SoC, SoD, SoH, WC, DoC, WAPC**)
- 2. Undertake fire mitigation, preparedness, response and recovery measures within the park in consultation with the community, key stakeholders, DFES and land managers in accordance with the requirements of the *Emergency Management Act 2005, Bush Fires Act 1954* and other relevant legislation. (DBCA, DFES, CoB, SoC, SoD, SoH, WC, DoC, WAPC)

Key performance indicator

<sup>12</sup> Other treatments could include mechanical methods (such as mulching, pruning, ploughing or slashing), chemical methods (such as spraying weeds and grasses before they emerge or mature) and grazing.

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Performance measure	Target	Reporting
Fire management plan for the park that proposes fire prevention,	Fire management plan for the	Every five
preparedness, response and recovery measures to reduce the risk of	park is developed, and	years
bushfire to life, community and park values and maintain	implemented in accordance with	
ecologically appropriate fire regimes	the plan	

# 11. Weeds and pest animals

### Weeds

Environmental weeds are native and introduced plants that invade natural ecosystems and negatively affect the survival of native plants and animals through reducing biodiversity, competing with native species for space, light, nutrients and water, disrupting ecosystem processes, altering fire regimes, changing and reducing native animal habitat and resources, and landscape and scenic values.



Wetland infested with arum lily. Photo – Jenny Kikeros/DBCA Herbarium volunteer

There are 77 weed species that have been recorded in the park. The most taxa-rich of the 28 weed plant families are Poaceae (grasses – 21 taxa), Fabaceae (legumes, peas and wattles – 10 taxa) and Asteraceae (daisies – 7 taxa). Weed invasions have been reported for the Leschenault Estuary (Pen *et al.* 2000), Manea Park (70 species, Bischoff 2003), Maidens Reserve/Shearwater Tuart Forest (55 species, Ecoscape 2002), Wardandi Flora Reserve (Shire of Harvey 2012), Eelup/Elbow wetland and Leicester Reserve (Shire of Dardanup 2008), Millars Creek (Waters 2017), Collie River (Leschenault Catchment Council 2008) and Brunswick River (Leschenault Catchment Council 2006). Weeds are a major issue

across many parts of the park (Table 6), particularly in open and/or previously cleared/grazed areas, along boundaries, along waterways and drainage lines, or in areas of disturbance such as along roads and tracks, and recreation sites.

Particular weeds of concern within the park include:					
Sydney golden wattle (Acacia longifolia)	blackberry (Rubus ulmifolius)				
lantana (Lantana camara)	madeira or potato vine (Anredera cordifolia)				
bridal creeper (Asparagus asparagoides)	narrow leaf cotton bush (Gomphocarpus fruticosus)				
arum lily (Zantedeschia aethiopica)	pampas grass (Cortaderia selloana)				
lupin (Lupinus cosentinii)	watsonia (Watsonia bulbillifera)				
cape tulip (Homeria flaccida)	perennial veldt grass (Ehrharta calycina)				
annual veldt grass (E. longiflora)	bulrush (Typha orientalis) <sup>13</sup>				
Weeds invading and replacing estuarine shore	eline vegetation (Pen <b>et al</b> . 2000) include:				
couch (Cynodon dactylon)	kikuyu (Pennisetum clandestinum)				
saltwater couch (Paspalum vaginatum)	buffalo grass (Stenotaphrum secundatum)				
pigface (Carpobrotus edulis)	pigface (Carpobrotus edulis)				

#### Table 6. Weeds in the park

DBCA applies the regionally-based <u>Weed Prioritisation Process</u>, which involves the prioritisation of weed species for control through a 'species-led' approach, an 'asset-protection-based' approach and other social, cultural, economic, good neighbour and resource considerations, including plants that are <u>declared pests</u> under the *Biosecurity and Agriculture Management Act 2007*, <u>Weeds of National Significance</u> or are on the <u>National Environmental Alert List</u>.

### Pest animals

Pest animals are those species that have the potential to cause significant environmental, social and economic impacts on local communities, visitors and natural values within the park (Table 7) through direct effects such as predation, habitat destruction, competition for food and territory, and introduction of disease, and through

<sup>13</sup> Bulrush is a native species (Keighery and McCabe 2015) and can become a weed in suitable habitat within the park.

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environmental degradation, for instance from overgrazing. Pest animals can be either native species that are impacting on natural values (for instance, from unsustainable populations) or introduced species that have become established as wild or naturalised populations. Native animals are protected under the Biodiversity Conservation Act, which places limits on the control of pest species on private and other lands, and a range of fauna licences may be needed for management of pest animals.

Table 7. Pest animals and control options in the park

Table 7. Pest animals and control options in the park
Fox (Vulpes vulpes)
Fox <u>baiting</u> is generally unsuitable within the park (except where baits are tethered and in areas away from the public) due to proximity to urban areas and high use by the community including for dog walking. Other control techniques such as foothold trapping and den management (SWCC 2015) may be suitable for fox control.
Feral cat ( <b>Felis catus</b> )
Trapping and targeted shooting. In addition to requirements under the <i>Cat Act 2011</i> and any Local Laws, feral cat control must minimise the potential risks of harm to owned (domestic) cats through notifications, identification (including microchip scanning) and other means in accordance with policies and standard operating procedures. European rabbit ( <i>Oryctolagus cuniculus</i> )
Rabbit control may be best achieved through (i) existing biological control such as the Rabbit Haemorrhagic Disease Virus
(or 'calicivirus') and myxomatosis, (ii) warren fumigation and/or ripping, and/or (iii) rabbit-proof fencing at specific sites to protect important natural values.
Little corellas (Cacatua sanguinea), galahs (Eolophus roseicapilla)
Control measures for <u>corellas and other flocking cockatoos</u> should be well planned, based on an understanding of the behaviour of the birds, varied frequently, integrated with different methods and be persistent, and may include scaring techniques, trapping and targeted shooting. The City of Bunbury and Shire of Harvey have corella control programs in place.
Feral European honeybee ( <b>Apis mellifera</b> )
Park managers seek the support of the public in detecting and reporting occurrences of feral honeybee nests within the park. Where feral honeybee nest sites are found, they can be removed by apiarists or by other means as a first priority before other management options are used such as fumigation or nest destruction, depending on the availability and suitability of options in each case.
Mosquitos (Aedes camptorhynchus and A. vigilax)
Mosquito management programs include monitoring of tides and weather (which can affect mosquito borne virus activity and breeding patterns), trapping, pre-treatment surveillance, runnels, <u>larviciding</u> , post-treatment surveillance, adulticiding (or fogging), and public awareness/notification. During spring and early summer, tides and mosquito larvae are monitored prior to implementing a targeted control program on the samphire saltmarshes, including floating bait dispensers and spraying (by helicopter) to limit adult mosquito numbers. Monitoring continues from September to April. Treatments may still be needed in late summer-autumn while water levels are lower. Runnels, which are installed in tidal areas at Mangrove Cove, Point Douro, Bar Island and Knapp's/Crimp Channel wetland, provide access for fish to feed on larvae and help the draining of tidal waters. Runnels may deteriorate over time and need maintenance. Monitoring and treatment on seasonal wetlands are also undertaken as needed. Control activities on CALM Act lands may require lawful authority and disturbance assessment by DBCA, and in nature reserves and high conservation value wetlands approval of the Conservation and Parks Commission.
Western grey kangaroo ( <b>Macropus fuliginosus</b> )
Monitoring of kangaroos and their impacts may be needed to provide a trigger for management control. Potential control
approaches include exclusion fencing, reducing numbers through targeted shooting or relocation, fencing and revegetation
of open grazing areas (SWCC 2015).
House sparrow ( <b>Passer domesticus</b> ), rainbow lorikeet ( <b>Trichoglossus haematodus</b> ) and ferret ( <b>Mustela putorius furo</b> )
Park managers seek the support of the public in securing captive animals in enclosures and detecting and reporting any

Park managers seek the support of the public in securing captive animals in enclosures and detecting and reporting any occurrences of these species within or near the park.

Pest animal control is a partnership and managing agencies should work wherever possible with the community, especially with neighbours and biosecurity groups, to share in the control and optimise the benefits across the landscape from works undertaken. The priorities and programs for pest animal (as well as weed) control are developed in collaboration with local government authorities, Department of Primary Industries and Regional Development (DPIRD), landowners and local Recognised Biosecurity Groups such as the Leschenault Biosecurity Group and the Peel Harvey Biosecurity Group.

# Management objective: To minimise the negative impacts of weeds and pest animals on the park.

Management strategies

1. Prepare and implement weed and pest animal control plans for the park that consider prioritising control on an 'assetprotection-based' and 'species-led' approach and other considerations including staff awareness and training, where relevant and appropriate. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, WAPC)

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- 2. Limit the opportunity for weeds to be introduced and established by (i) applying appropriate hygiene practices to machinery entering the park, (ii) minimising disturbance of soil during operations, and (iii) restricting the importation of soil to only those sources with strict soil quarantine, where relevant and appropriate. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, WAPC)
- 3. Maintain monitoring and management programs for mosquitos through the Leschenault and Geographe Mosquito Management Groups and provide for minimal environmental impact mosquito control methods and programs, where appropriate. (**DoH, CoB, SoC, SoD, SoH, DBCA**)
- 4. Work with relevant agencies, adjacent land managers, other organisations, community groups, visitors and volunteers to facilitate effective, coordinated management of weeds and pest animals, where relevant and appropriate. (**DBCA**, CoB, SoD, SoH, WC, DoC, DWER, WAPC)

Key performance indicator		
Performance measure	Target	Reporting
Control plans that prioritise the control of weeds and pest animals	Weeds and pest animal control plans for the park are developed, and implemented in accordance with the plans	Every five years

## 12. Plant and animal diseases

Phytophthora Dieback refers to the disease caused by soilborne plant pathogens from the genus Phytophthora. Phytophthora cinnamomi is considered the most significant plant disease in the regional park because many of the plant families most at risk from P. cinnamomi, such as Proteaceae, Myrtaceae, Ericaceae and Fabaceae (Shearer et al. 2004) are present within the park, and P. cinnamomi can irreversibly change the composition of many plant and animal communities (Shearer et al. 2009). Although much of the park has not been surveyed for Phytophthora, P. nicotianae has been recorded in Manea Park, P. multivora has been recorded at the nearby Edith Cowan University campus, and Phytophthora Dieback has been recorded in Manea Park, at Australind on unmanaged R33247 and WAPC freehold Lot 31 on Plan 232758, and along the Brunswick River at Wellesley on R43511, R45532 and Lot 500 on Diagram 74316.

Phytophthora Dieback can be introduced and spread by vectors such as motor vehicles, earth-moving equipment, humans (through walking), bicycles, horses and rehabilitation planting through the movement of infested soil and plant matter. As *Phytophthora* species are all soil-borne pathogens, measures to reduce the spread of *P. cinnamomi* will be beneficial in reducing the spread of other *Phytophthora* species, other soil-borne pathogens and some weed species.



Boot cleaning station in Manea Park. Photo -Paul Roberts/DBCA

Phytophthora Dieback is best managed as part of an integrated disease management strategy for the whole park. Factors triggering consideration of *P. cinnamomi* surveys may be proposed tracks/facilities or observed expansion of disease extent.

Honey fungus (*Armillaria luteobubalina*) has been found in the Maidens area (Hart Simpson and Associates 1994) and is a major plant pathogen in coastal dune vegetation, including tuart forests and banksia woodlands of the Spearwood Dune System.

Marri is susceptible to cankers<sup>14</sup> caused by the endemic fungus *Quambalaria coyrecup*, which results in high disease incidence and mortality of trees (Paap *et al.* 2018).

<u>Diseases in native animals</u> can contribute to poor population health, reduced fertility and local decline of populations, and appropriate hygiene is required for native animal management activities and is also important in caring for or applying first aid to sick or injured wildlife.

<sup>14</sup> Cankers are a formed where fungi invade trunks, branches or twigs of trees through wounds or areas of stress and form gum staining, bark cracking or shedding, or lesion symptoms leading to the death of areas of tree tissue.

#### Management objective: To minimise the impact and spread of plant and animal diseases.

#### Management strategies

- 1. Prepare and implement Phytophthora Dieback guidance for the park. (DBCA, CoB, SoD, SoH, WC, DoC)
- 2. Consider appropriate hygiene measures (including hygiene management plans and training) for management operations (including use of contractors) and proposed developments based on risk. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, WAPC)
- 3. Provide information, interpretation and education material that promotes an understanding and appreciation of the threat that diseases pose to the park's native plant and animals, and to staff and wildlife carers handling or coming into contact with wildlife. (DBCA)

# 13. Climate change

The temperate climate of the regional park is characterised as 'Mediterranean' with hot, dry summers and mild, wet winters, and is controlled by the eastwards passage of anticyclones and associated troughs (Oma 1989). Climatic data recorded from the Bunbury weather station (Site No. 009965) for 1995-2019 shows that the mean minimum temperature ranges from 7.1°C in July to 15.8°C in February and the mean maximum temperature ranges from 17.3°C in July to 30.0°C in February (Bureau of Meteorology 2019). The mean annual rainfall (1995-2019) of 726.1mm falls mainly between May and September, with the highest mean rainfall in July (142.5mm) (Bureau of Meteorology 2019).

Climate can significantly affect the physical and environmental values of the park and increase the pressures on individual species, communities and ecosystems. The seasonal climate variations from year-to-year and climate cycles are important factors in determining vegetation patterns, their condition and vulnerability to other climate induced impacts such as bushfires, cyclonic summer rainfall, windstorms and drought, as well as habitat conditions for native animals.

Climate change projections for the south-west of WA (CSIRO and BoM 2015) show continuing trends of:

- decreasing winter, spring and annual rainfall
- increasing mean, maximum and minimum temperatures in all seasons
- increasing extreme temperatures, frequency of hot days and duration of warm spells
- increasing intensity of extreme rainfall events and time spent in drought
- increasing mean sea level rise
- harsher fire-weather climate.

Predictions of the impact of climate change are many and varied, and include:

- an overall reduction in biodiversity, notably of endemic species
- changes in the distribution and range of native and introduced species and ecosystems and their functioning, notably biodiversity that are: (i) sensitive to changes in water availability, quality and/or temperature, (ii) sensitive to changes in micro-climates through heat stress or changes in air and soil moisture, (iii) unable to disperse effectively to appropriate habitat, (iv) unable to survive and adapt to an increase in the frequency and intensity of fire, and (v) subject to predators increasing in number and range
- a rise in sea level, coupled with declining inward freshwater flows, is likely to alter habitats for estuarine and terrestrial species through: (i) an increase in extent of marine waters and hence a decline in brackish and freshwater habitats, (ii) inundation that will destroy or degrade habitats for terrestrial species, and (iii) decreasing estuarine habitats through deoxygenation and increased algal blooms
- declining surface freshwater flows are likely to lead to a progressive shift from aquatic to terrestrial species and habitats, producing: (i) loss of biodiversity specific to surface water dependent wetlands, (ii) a loss of aquatic refuges in headwater streams during summer, (iii) a decrease in connectivity between pools and freshwater sources and increase in barriers to dispersal, (iv) altered nutrient cycling and associated effects, and (v) a loss of cold water species
- the potential loss of groundwater resources is likely to lead to declines in groundwater-dependent species
- possible phenological shifts in growth and reproduction timing and cycles (including flowering and migration) due to altered environmental triggers
- changes in habitat conditions in space and time lead to the emergence of novel ecosystems, which will favour some native species but threaten others, including a potential increase in, and southwards incursion by, some invasive pest species
- possible shifts in levels of genetic variation in populations and associated spatial patterns.

These impacts of climate change will be exacerbated where they interact with other pressures upon biodiversity, notably ecosystem degradation and destruction, altered fire regimes and invasive pest species, and the associated loss of species habitats. Certainty around the accuracy and precision of climate change predictions and their associated effects on biodiversity is low and so flexible management strategies will be essential to ensure resilience of ecosystems and species habitats.

Coastal erosion and inundation are some of the most significant long-term threats to the park's coastal areas (Section 7), which are west-facing sandy beaches that are exposed to south-westerly swells and the north-westerly storms.

#### Management objective: To minimise the effects of climate change on park values.

#### Management strategies

- 1. Consider the results of climate change information, as it become available, and incorporate this into adaptive management strategies at the regional, community and species level. (DBCA, CoB, SoD, SoH, WC, DoC, DWER)
- Continue existing fire, pest and weed management programs to increase the park's ability to cope with future disturbances, including climate change, where relevant and appropriate. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, WAPC)

# 14. Pollution, contamination and waste management

Potential pollution from within the park or surrounding lands may impact on park values, including from:

- surface water pollution for example chemicals, nutrients or weeds from industrial areas; nutrients carried in sediments through the stormwater system; and garden fertilisers, herbicides and pesticides used in urban areas
- groundwater pollution for example seepage from septics, and nutrients and chemicals from agricultural and industrial activities
- marine pollution for example fuel and oil spills, litter (such as plastics and fishing line), bilge and ballast discharge from ships, and sewage
- land pollution for example illegal dumping of urban, visitor, industrial and agricultural waste including rubbish, scrap or soil; and inappropriately disposed solid and liquid waste generated by visitors at camping areas or from recreational activities.

### Contaminated sites

There are 14 sites in the regional park that have been reported as a known or suspected contaminated site in accordance with the *Contaminated Sites Act 2003* and are subject to Contaminated Sites Regulations 2006. Seven of these sites are confirmed contaminated sites identified on DWER's 'Contaminated Sites Database' and seven sites are other reported sites listed on the 'Reported Sites Register'.

## Waste management

Illegal dumping of rubbish is a significant management issue in some areas of the park. The management of rubbish and wastes will focus on:

- the enforcement of relevant local laws or the application of the *Litter Act 1979* or CALM Act and regulations relating to rubbish dumping
- where appropriate, minimising and/or maintaining rubbish disposal facilities consistent with relevant managing agency policies and local laws
- providing visitors with appropriate information and education about waste management, and encouraging them to take their rubbish home where bins are not provided
- minimising unmanaged access into the park through the provision of boundary fencing (Section 4).

# Management objective: To minimise the production and impacts of pollution and waste on park values.

Management strategies

1. Identify and report any potential contamination sites in accordance with the requirements of the *Contaminated Sites Act* 2003. (DBCA, CoB, SoD, SoH, WC, DoC, WAPC, DWER)

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- 2. Investigate, remediate and monitor confirmed contaminated sites where necessary, in accordance with the requirements of the *Contaminated Sites Act 2003*. (DBCA, CoB, SoD, SoH, WC, DoC, WAPC, DWER)
- 3. Assess and implement site design and management measures to reduce littering in the park, where relevant and appropriate. (DBCA, CoB, SoD, SoH, WC, DoC, WAPC, DWER)
- 4. Provide interpretive and education material to inform park visitors and neighbours about the adverse impacts of pollution and inappropriate litter or waste disposal, where appropriate. (DBCA, CoB, SoD, SoH, WC, DoC)

# 15. Rehabilitation

There are many areas in the park that have environmental degradation resulting from grazing, weed infestation, previous bushfires, unauthorised access, recreational activities or development, and utilities and service corridors, which have modified vegetation communities and some park edges and significant patches have little to no native vegetation.

Areas within the park that may be potential candidates for rehabilitation projects include:

- cleared areas north of Eelup/Elbow wetland, to create ecological connections to the Collie River
- cleared area on the river at The Junction/Twin Rivers
- degraded areas within Point Douro
- degraded areas within Manea Park
- riparian areas along the Collie and Brunswick Rivers
- degraded dunal and woodland areas within Shearwater Tuart Forest and Maidens Reserve
- degraded dunal areas within the Leschenault Peninsula Conservation Park.

Management objective: To rehabilitate or restore degraded areas in the park to enhance ecosystem functionality and help protect park values.

- 1. Undertake rehabilitation or restoration in accordance with best practice principles and standards, and coordinate works with other management operations including protecting treatment areas from threatening processes. (**DBCA**, CoB, SoC, SoD, SoH)
- 2. Consider the participation of volunteers, school groups and local communities in rehabilitation works. (DBCA, CoB, SoC, SoD, SoH)

# Cultural heritage

# 16. Noongar cultural heritage

Noongar people are the traditional owners of the south-west, which includes the regional park. There are fourteen Noongar language (dialect) groups across the south-west, with each group relating to specific geographic areas with ecological distinctions. The park is located within four of these groups – *Pinjarup*, *Wadandi*, *Kaneang* and *Wilmen*, although the spelling and boundaries of these groups may vary.

Noongar people have inhabited the south-west for up to 50,000 years (Dortch and Dortch 2001, Turney *et al.* 2001) and have developed a close association with their *boodja* (land or country).

Within the park:

- four registered Aboriginal heritage sites and four sites that are not registered ('other heritage place') occur within the Leschenault part of the park
- one registered Aboriginal heritage site and one 'other heritage place' occur within the Preston River to Ocean part of the park
- two registered Aboriginal heritage sites and eight 'other heritage places' occur within the Preston River link.

The Leschenault Estuary and Preston, Collie and Brunswick rivers (and their tributaries) are mythological sites associated with the Waugal that is believed to have created many of the rivers in the south-west, including the Collie, Brunswick and Preston rivers, and is still present in all these sources of water. When approaching pools or places for swimming or fishing where the Waugal was known to reside, propitiatory rituals such as offering articles of food, singing and throwing sand into the water are conducted so that no harm would befall those who approached.

Manea Park was a hunting and camping area traditionally used by elder Noongar people, who would access the Preston River and adjacent swamplands for fresh water supplies and food, and woodland areas in Dalyellup, Shearwater and Manea Park were important corridors used for hunting and accessing the coast for fishing (WAPC 2011).



The Junction/Twin Rivers where the Brunswick River (left) meets the Collie River (centre and right). Photo – Lorna Charlton/DBCA

A range of other Aboriginal heritage sites are described across the park including artefacts/scatters, camps, modified tree, ceremonial, man-made structures, skeletal material or burial sites. However, it is likely that registered sites only represent a small proportion of the actual Aboriginal heritage sites within the regional park. Aboriginal heritage sites are protected, whether known or not, and large areas within the park have not been the subject of formal heritage surveys. DBCA has a Noongar Standard Heritage Agreement (NSHA) with Gnaala Karla Booja (GKB) native title group which establishes a uniform and efficient Aboriginal heritage survey regime for land clearance and the protection of sites/objects. Rivers, estuaries, foreshores and wetlands should be a focus of cultural heritage management, and due diligence should be exercised during any on-ground works (such as fencing and revegetation) given the potential for archaeological sites to exist. The State Government's <u>Aboriginal Heritage Due Diligence Guidelines</u> guides management actions to ensure Aboriginal heritage sites are not adversely impacted.

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### Native title

The only <u>registered native title claim</u> that covers the park is for GKB (<u>National Native Title Tribunal</u> number WI2015/005), who are represented by the <u>South West Aboriginal Land and Sea Council</u> (SWALSC) native title representative body. The <u>South West Native Title Settlement</u> (SWNTS) provides Noongar people with recognition as traditional owners of the south-west of WA, establishes the Noongar Land Estate and six Noongar Regional Corporations, implements a standard heritage process, and provides a range of economic and community development outcomes, in exchange for the surrender of native title and resolution of native title claims. Under Indigenous Land Use Agreements specific areas of DBCA-managed lands will be identified to be jointly managed under the CALM Act by Joint Management Bodies established under Joint Management Agreements.

### Customary activities

The CALM Act (and associated regulations), with the Biodiversity Conservation Act, allow Noongar people to access DBCA-managed lands to conduct traditional activities, subject to regulations. Amendments to the Metropolitan Water Supply, Sewerage and Drainage By-laws 1981 and the Country Areas Water Supply By-laws 1957 also enable Noongar people to legally do certain customary activities in Public Drinking Water Source Areas (PDWSAs). Such traditional customary purposes may be for medicinal, artistic, ceremonial or other cultural purposes. However, certain customary activities, such as hunting, may be inappropriate in places where it is evident there is a real and significant risk to public safety, the protection of native plants and animals or other uses, users or values, as outlined in DBCA's *Guide to Aboriginal customary activities*.

### Working relationships with Noongar people

The CALM Act has a management objective "to protect and conserve the value of the land to the culture and heritage of Aboriginal people" and establishes legal frameworks to enable joint management of lands and waters between DBCA and other parties. The SWNTS provides for a cooperative and joint management framework for all CALM Act land within the settlement area and establishes a formal governance arrangement for DBCA and Noongar people to work together.

<u>Reconciliation Australia</u> promotes and facilitates respect, trust and positive relationships between the wider Australian community and Aboriginal people through its *Reconciliation Action Plans* program. Management agencies in the regional park have developed and are implementing reconciliation action plans (RAPs). A regionwide <u>Bunbury-Geographe Reconciliation Action Plan Reflect</u> has been developed for the City of Bunbury and the Shires of Capel, Dardanup and Harvey.

Some of the ways that the cultural ties between Noongar people and *boodja* can be better appreciated, cross-cultural awareness enriched and working relationships strengthened is through:

- Noongar naming of reserves and other park features/places
- appropriate signage and cultural interpretation at key sites around the park
- developing walk trails that tell stories of Aboriginal Dreaming, the significance of key sites and other aspects of Noongar culture.

Employment of Noongar people is another way of creating greater cross-cultural awareness upon which to build better working relationships between managing agencies and Noongar people. It is also an important mechanism for developing expertise among Noongar people which can lead to long-term employment.

There is considerable and growing interest in <u>Aboriginal tourism in WA</u>, and there are opportunities to capitalise on this interest given the closeness of the regional park to urban areas, which can deliver tourism and other social and economic benefits to Noongar people (Government of Western Australia 2011).

Management objectives: To identify and protect significant Noongar places and values. To involve Noongar people in managing the park. To improve understanding of the Noongar heritage values of the park.

- 1. Protect, maintain, manage and where possible record and monitor known or identifiable sites of Noongar cultural heritage significance in accordance with the requirements of the *Aboriginal Heritage Act 1972*. (DBCA, CoB, SoD, SoH, WC, DoC, DWER, DPLH, WAPC)
- 2. Maintain and build cooperative management arrangements with Noongar people for lands within the park, consistent with legislation, policy and the SWNTS. (**DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, WAPC**)

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3. Where appropriate, undertake cross-cultural awareness, Aboriginal heritage site identification and other relevant Noongar cultural heritage training for relevant managing agency staff. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, DPLH)					
Key performance indicator					
Performance measure	Performance measure Target Reporting				
Protection of Aboriginal heritage sites       No disturbance of registered Aboriginal heritage sites because of park management operations without formal approval and consultation through the GKB/SWALSC NSHA process.       Annually					

# 17. Other cultural heritage

A range of other cultural heritage sites occur within the park associated with the initial exploration and settlement in the early years of the Swan River Colony and the subsequent development of the greater Bunbury region including:

- the twin peaks of the Maidens (Heritage Place No. 5741) were identified as significant landmarks and ocean navigational references by English and French maritime explorers from the late 1790s
- Bunbury's first settlers were John and Helen Scott who arrived in 1838 and established a farm at Eelup<sup>15</sup> (Heritage Place No. 6617) at the request of landowner Governor James Stirling
- Thomas Little also arrived in 1838 and built a homestead at Belvidere (Heritage Place No. 17632) on the Leschenault Peninsula that was bought by Charles Robert Prinsep, which was originally part of land granted to William Hudson in 1831 (Wooltorton 2013)



The twin peaks of the Maidens are a part of the Preston River to Ocean bushbelt. Photo – Shem Bisluk/DBCA

- William Kernott Shenton established a house on the banks of the Collie River in the 1830s (Shire of Harvey Municipal Inventory)
- Point Lautour, at the junction of the Collie and Brunswick rivers, was named after Colonel Peter Augustus Lautour who held the first land grant in the Leschenault area in 1830 (Shire of Harvey Municipal Inventory)
- the Australind Memorial (Heritage Place No. 11964) on the eastern shore of Leschenault Estuary commemorates the vision of the Australind Settlement
- the wooden whaler '*North America*', which was carrying whale oil and provisions, was shipwrecked at Mangrove Cove (Heritage Place No. 5660) in 1843
- in 1849 William Forrest built the Forrest Homestead (Heritage Place No. 381) at Picton, which lies adjacent<sup>16</sup> to the Preston River Link part of the park. In 1851 Forrest built a water mill and mill race (Heritage Place No. 5676) to produce flour for the district
- the wooden brig 'Annie M Young', which was transporting jarrah and other cargo, was shipwrecked along the North Beach (Turkey Point) foreshore (Heritage Place No. 5658) in 1876
- a memorial to convict John Boyle O'Reilly, who escaped custody in 1869 and hid in the dunes in Leschenault Peninsula Conservation Park before boarding the American whaler '*Gazelle*' and escaping to America, and other convicts that worked in the district stands at the entrance to Leschenault Peninsula Conservation Park (Heritage Place No. 3163)
- Picton Inn (Heritage Place No. 382), which lies adjacent <sup>17</sup>to the Preston River Link part of the park, was built in about 1850 and serviced the needs of travellers using the Preston River ford
- Thomas Walter's Turkey Point holiday resort opened in 1918 (Heritage Place No. 5637) and was a popular local holidaying destination up to the 1950s, involving boating across Leschenault Estuary at the time to access tea rooms, accommodation, and recreation facilities
- the Preston River to Ocean bushbelt (City of Bunbury Municipal Inventory) (Heritage Place No. 5670) listed as a result of increasing population and residential development.

<sup>&</sup>lt;sup>15</sup> The spelling for this corresponds to the Heritage listing but is equivalent to Elaap.

<sup>&</sup>lt;sup>16</sup> The registered site extends into the park.

<sup>&</sup>lt;sup>17</sup> The registered site extends into the park.

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# Management objective: To identify and protect other cultural heritage values of significance.

- 1. Protect, maintain, manage and where possible record and monitor known or identifiable other sites of cultural heritage significance. (DBCA, CoB, SoD, SoH, WC, DoC, DWER, DPLH, WAPC)
- 2. Ensure that other cultural heritage values of the park inform and guide management actions, where relevant and appropriate. (DBCA, CoB, SoD, SoH, WC, DoC, DWER, DPLH)

# Visitor use

# 18. Visitor use and planning

The regional park is of high recreational value as it provides a range of nature-based recreation opportunities associated with coastal, riverine and bushland environments within and close to urban populations of the greater Bunbury region. This plan will encourage visitor use while ensuring that the level and type of use are sustainable and minimise conflict with other park visitors and values.

Visitation to the regional park is likely to be high given the proximity of the park to urban areas. More than 247,700 visits alone were recorded for Leschenault Peninsula Conservation Park in 2017– 18, which increased from 93,270 visits in 2011–12. Visitor numbers to the park are expected to continue to increase with residential developments in the greater Bunbury region and with greater awareness of the regional park's attributes. Much of the recreational use of the park is likely to be by local communities, which are increasingly valuing and using the open spaces and facilities of local park areas.

Existing recreation sites and opportunities in the park are shown on Maps 4a and 4b. The most popular recreation activities in the park include bushwalking, cycling, nature observation, fishing, picnicking, dog walking and scenic driving (Table 8).

The boat ramp at Ridley Place provides access through the park to the Leschenault Estuary for various boating activities. Photo – Shire of Harvey

Table 8. Recreation activities in the park

#### Boating

DoT is responsible for safety and navigation on waters surrounding the park, and the <u>Bunbury-Busselton Boating Guide</u> provides guidance for boating. Formal boat ramps occur at Ridley Place in the Leschenault Estuary and Eaton Foreshore, Pelican Point and 'The Elbow'/Eastwell Road along the Collie River (with floating jetty). The disturbance of estuarine sediments from boating access is an issue along the Estuary side of the Leschenault Peninsula Conservation Park, and boat landing/access is restricted to non-motorised boats. The jetty at Tuart Grove is proposed to be removed (for boat access). Boating may also contribute to riverbank and foreshore erosion.

#### Bushwalking

Bushwalking trails include the dual-use Tuart Walk/Dalyellup-Usher trail, Maidens Reserve walk trail network, <u>Pultenaea</u> <u>Loop</u> (Manea Park), <u>Mangrove Cove boardwalk, Eaton Foreshore Walk</u> through to Watson Reserve, Collie River foreshore walk (north side), Leschenault Estuary trail, Brunswick River foreshore walk (north western side), Millars Creek, John Boyle O'Reilly walk, Belvidere Interpretive Walk and Harris Track. More bushwalking trails may be proposed for the park in conjunction with future detailed recreation area/site or urban development planning.

#### Campino

Designated camping facilities are at <u>Belvidere campground</u> and The Cut campground (accessed by boat, or by walking or cycling on the management access track from Belvidere). Informal camping is not allowed in the park. <u>Campfires and firewood</u> collection can have detrimental effects on the natural environment. Hot ash and coals from beach campfires, as well as glass and other rubbish thrown into campfires, can be a visitor risk, and campfire escapes are a cause of bushfires. Gas barbecues are provided at major recreation sites in the park, but some campfires are allowed in fire rings at Belvidere and The Cut, except when fire bans apply.

#### Cycling

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Cycling occurs in areas of the park also used for bushwalking such as the dual-use Tuart Walk and Pultenaea Loop. The *Bunbury-Wellington 2050 Cycling Strategy* (DoT 2018b) outlines potential cycling opportunities in the region including proposed new or improved existing facilities along the eastern side of Leschenault Estuary, the western side of Leschenault Estuary, a bridge<sup>18</sup> across The Cut to facilitate a future cycling loop around Leschenault Estuary, along the Collie, Brunswick and Preston rivers, along Millar's Creek between Collie River and Forrest Highway, and Five Mile Brook. Local government authorities also have local bike plans identifying local priorities for bicycle networks. The South West Mountain Bike Master Plan (WestCycle 2015) identifies the Maidens Reserve and the edges of the Collie and Preston rivers as potential areas for future mountain bike trail development. Sandy soils and sensitive environments in many areas of the park may require some trails to be hardened.

#### Day-use

Day-use sites across the park provide a range of facilities such as barbecues, toilets, tables, playgrounds and shelters, as well as opportunities for a range of activities such as nature appreciation, lookouts, interpretation and bushwalking. There is potential for new or upgraded facilities for many park areas and sites. Parts of Maidens Reserve have potential for a regional-level attraction including a lookout facility at the old trigonometrical station.

#### Dogs and cats

Dogs are allowed on the ocean beaches below the high-water mark in Leschenault Peninsula Conservation Park provided they are kept on a leash. Local government authorities are responsible for administering and enforcing the *Dog Act 1976*, which requires dogs to be on leash at all times in public places. The exception is within local government proclaimed Dog Exercise Areas, where dogs are permitted off-leash. Off-leash Dog Exercise Areas in the park occur at Loughton Park (middle section), Pelican Point foreshore and Maidens Reserve beach in the City of Bunbury, reserve 25417 (Watson reserve), reserve 43641 (Leicester Reserve) and reserves 24359 and part 25417 (Eaton Foreshore, only between 7.00pm to 10.00am) in the Shire of Dardanup, and reserves 31576<sup>19</sup> and 43714 (Clifton Community Reserve) in the Shire of Harvey. It is proposed to change the off-leash areas of Leicester Reserve (outside of eastern landscaped areas), bushland areas of Watson Reserve and bushland areas of Clifton Community Reserve to on-leash dog areas. Several Dog Exercise Areas also occur next to or near the park<sup>20</sup>.

Local governments are also able to designate dog-prohibited areas under the *Dog Act 1976* on lands and waters that are under their control, care and management, and the park area within Hay Park is the only area where dogs are prohibited. Prohibited areas proposed in future conservation reserves to be managed by DBCA in the park because of conservation values are Point Douro, Loughton Park bushland areas, Elbow/Eelup wetland and nearby river foreshore and Crown reserve 52873 at north Treendale.

The *Cat Act 2011* requires all cats to be sterilised, microchipped, tagged and registered, and provides for local governments to make local laws under this Act and administer and enforce the Act and Cat Regulations 2012. Local governments can designate cat prohibited areas in accordance with local laws. Cat prohibited areas in the park include Maidens Reserve, Manea Park, Hay Park and Loughton Park.

#### Events and group activities

In general, many organised group activities may be an acceptable use of the park, provided they:

- are sensitively located to maintain natural and cultural values
- are properly planned and managed
- do not interfere with other forms of recreation or other activities
- are safe for participants and spectators
- are not resource-demanding on managing agencies.

Special events that present opportunities for nature-based recreation may be permitted in the park, subject to the policies of, and approval from, relevant managing agencies and other authorities (such as Department of Health and DWER).

Fishing platforms are located at Turkey Point (The Cut) and the Elbow. Recreational fishing (freshwater and coastal) is managed under the *Fish Resources Management Act 1994* by DPIRD and is allowed within the park unless specified. Access for fishing can cause environmental degradation to riverbanks, foreshores and dune systems and existing informal access along rivers may need to be consolidated. Vehicle access to Buffalo and Belvidere beaches for recreational and commercial fishing may continue provided (i) there is ongoing cooperation between fishing groups and DBCA, (ii) the fragile dune systems are protected, (iii) conflict between the users of the beaches are minimised, and (iv) relevant activity codes are adhered to. Vehicle access to the Maidens Reserve beach for commercial fishing may continue in accordance with City of Bunbury's local laws and policies.

#### Horseriding

Horse use will continue to be permitted at City of Bunbury lands in accordance with *Reserve areas set aside for the riding* of horses Council Policy. Horseriding in areas of the park will vary with the relevant managing agency and will be reviewed on an ongoing basis. For example, horseriding in the park within Shire of Harvey managed lands near Cathedral Avenue

<sup>&</sup>lt;sup>18</sup> Implementation of a bridge would trigger the need for significant investment in a major re-development of the existing site at The Cut to cater for the resultant change in accessibility and visitor numbers.

<sup>&</sup>lt;sup>19</sup> Part of R31576 (Lot 5117 on Plan 9821 and Lot 500 on Plan 66272) is a 'dog on-leash' area.

<sup>&</sup>lt;sup>20</sup> See relevant local government authorities for details of these areas.

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can continue, while horse access within proposed conservation reserves to be managed by DBCA, including Manea Park, will not be permitted.
Nature appreciation
Many people use areas in the park for nature appreciation activities. Several <u>birdwatching</u> sites occur in the park including Point Douro and Leicester Reserve. Inappropriate interaction with wildlife can put visitors and wildlife at risk. Issues include disruption of wildlife activities such as feeding (including through poor rubbish management), breeding and/or nesting, direct injury such as nest trampling (via people, horses and dogs), or changes to habitat. Adverse effects can be minimised through the provision of information, restricting vehicle access on beaches, and the appropriate siting/design of facilities.
Remotely piloted aircraft
The Civil Aviation Safety Authority (CASA) is responsible for regulating remotely piloted aircraft or drones, model aircraft and rockets under the Civil Aviation Safety Regulations 1998 regardless of land tenure <sup>21</sup> . Areas where drones are not allowed to fly are identified on CASA's 'Drone safety apps', which includes an area around the Bunbury Airport. The use of drones, model aircraft and rockets on and over the park must comply with CASA regulations, Biodiversity Conservation Regulations (which provide separation distances from prescribed animals) and local government policy and directions. The use of remotely piloted aircraft for commercial or surveying purposes over DBCA-managed lands requires a licence or lawful authority in accordance with CALM Act regulations.
Running and navigation activities
Orienteering, rogaining, cross-country running <sup>22</sup> and geocaching are appropriate within some parts of the park, with lawful authority, where they do not conflict with the protection of the natural and cultural environment, with other park visitors or management operations. The placement of geocaches must adhere to the geocache hiding guidelines.
Sandboarding
Regulation 32 of the CALM Regulations and City of Bunbury local laws prohibits sandboarding on DBCA-managed and City-managed land respectively without lawful authority, and sandboarding will continue to not be allowed in the park because of the environmental damage that is occurring or may potentially occur.
Scenic driving and motorised recreation
Four-wheel drive vehicles can access Turkey Point and Buffalo and Belvidere beaches. Continued four-wheel drive access along the beach at Leschenault Peninsula Conservation Park can be maintained provided that the activity does not damage the fragile dune system, harm other areas with conservation and heritage values or cause conflict with other users of the beach. Four-wheel drivers must only access the beach between the high and low-water marks. Four-wheel drive and other vehicles are not allowed to access the beach next to or through Maidens Reserve.
Swimming and other water activities
Swimming occurs at Mindalong Beach, Turkey Point, Eaton Foreshore, Watson Reserve and Buffalo and Belvidere beaches. Some of these swimming sites also attract surfers and other water users. A beach for nude bathing is located along Mindalong Beach about 400m south of the Mindalong Beach steps for a distance further south of 200m.

### **Recreation planning**

Planning for visitor use within the park is necessary to manage the 'recreational development criteria' of visitor risk, social benefit, equity, public demand, potential economic benefit and environmental impacts caused by human activity, and needs to consider urban growth and development including the associated potential for increased pressure on the park. Recreation plans help ensure that a variety of recreation opportunities are offered in the park, help coordinate recreation developments and allocate appropriate facilities and services to those areas of the park best able to sustainably accommodate them. Changes in recreational development criteria may result in adjustments to prioritised recreation planning, sites and activities and the way visitor impacts are managed during the life of the plan.



Lookout overlooking Collie River in the Shire of Dardanup's Pratt Road Reserve. Photo – Paul Roberts/DBCA

Recreation plans reflect the management zones and land uses (Section 5, Appendix 3). Generally, access to the 'Conservation and Protection' zones of the park will be limited, with an emphasis on the enjoyment of nature, interpretation and habitat protection. The 'Natural Environment Use' zones will have greater access, primarily by walking trails and cycle paths, and the provision of some facilities is anticipated. The 'Recreation' zones will be

<sup>&</sup>lt;sup>21</sup> Information on safety rules for flying drones in Australia is available at <u>casa.gov.au/drones</u> .

<sup>&</sup>lt;sup>22</sup> 'Cross-country running' includes, for the purposes of CALM regulation 50, trail running.

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the most intensively used and modified sections of the park, which will have an emphasis on providing welldesigned recreation facilities without detracting from the natural or cultural values of the park.

Risks to visitors within the park include falling tree limbs, slips/trips and falls, mosquito, snake and tick bites, coastal and inland water risks, and bushfire. Parts of the regional park may be relatively remote or difficult to access by emergency services such as the Leschenault Peninsula. Many visitor risks can be overcome through attention to personal safety (such as the registration of trip details with friends or family, and behaving responsibly while undertaking recreation activities that involve risk), appropriate building and maintenance of facilities, and appropriate risk warning information and signage. Where illegally built structures in the park, such as rope swings and bike jumps, pose safety risks they will be removed by management agencies.



The Cut at the southern end of the Leschenault Peninsula. Photo – Shem Bisluk/DBCA

There is considerable scope for recreational development across the park for the improvement or expansion of sites, new sites and facilities, while managing and minimising environmental impacts. Tourism sites in the park include Mangrove Cove, Maiden's Eaton Foreshore, Leschenault Reserve, Estuary and Leschenault Peninsula Conservation Park, and there is potential for further tourism development at Mangrove Cove, Maiden's Reserve, Turkey Point and The Cut, Ridley Place and the trails network. For some areas, there may be limited use and few plans for recreation, but recreation plans may evolve during the life of the plan as nearby urban populations expand and pressure

on or demand for areas for recreational use of the park increase. A potential upgrading of The Cut's campground and day-use area to allow four-wheel drive vehicles access to and egress from the site via the beach only will protect the dunes and meet an existing demand for use of the site but will require proper planning and structures such as fencing and gates to restrict vehicle movement, and in time renewal of facilities. The potential upgrading and use of Turkey Point for recreation is linked to future plans for Bunbury Port expansion (Section 2). It will be important for recreation proposals to be referred to a range of key stakeholders that have responsibilities or interests in certain areas such as DWER, Water Corporation, relevant local governments, neighbours and local communities.

### Management objective: To provide and manage a range of safe, quality and minimalimpact recreation sites, facilities and activities.

- 1. Provide, maintain and/or improve a range of recreation sites, facilities and activities consistent with recreational development criteria and in consultation with key stakeholders, where relevant and appropriate. (DBCA, CoB, SoC, SoD, SoH)
- 2. As needed, develop and implement recreation plans for specific areas within the park that are consistent with a Recreation Masterplan for the park. (DBCA, CoB, SoD, SoH)
- 3. Assess, mitigate, manage and/or monitor visitor risks associated with recreation, works, proposed development and maintenance programs and proposals, where appropriate. (DBCA, CoB, SoD, SoH, DoC, WC)
- 4. Where appropriate, ensure new paths allow for emergency and management vehicle access. (DBCA, CoB, SoD, SoH, DoC, WC)
- 5. Consider changes to recreation activities, including dog exercise areas, in consultation with managing agencies. (DBCA, CoB, SoD, SoH, WC, DoC)

6.	Consider proposals	for cultural and	other ecotourism	opportunities in the	park. ( <b>DBCA</b> ,	CoB, SoC, SoD, SoH)
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Key performance indicator		
Performance measure	Target	Reporting
Number of visits (as measured by DBCA) to selected recreation sites	Level of visitation at selected recreation sites to be maintained or increased from 2020 levels	Every five years

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# 19. Visitor information, interpretation and education

Visitor information, education and interpretation raises awareness about the park and its values (such as informing the public of attractions, facilities and recreation opportunities within the park), promotes support for its management, and encourages community involvement and appropriate behaviours so that adverse impacts on the environment are minimised. Communication is also vital to managing visitor risk so that visitors have safe and enjoyable park experiences. Interpretation is provided at sites within Leschenault Peninsula Conservation Park and Manea Park and at the Eco Museum (on the Leschenault Estuary eastern foreshore), Tuart Walk and other recreation sites. The park provides opportunities for education programs and activities for schools including DBCA's <u>Bush Ranger</u> program, which is active at several schools in the Bunbury area.

DBCA's *Regional Parks Sign Manual* will provide guidance on the provision of signage for the regional park to help ensure that signs are designed and located appropriately and guide the development of the regional park's branding (colour, style and logo) to enhance public recognition of the park. Local government authorities and other land management agencies will be encouraged to adopt the regional park's signs system and logo for signs in areas of the park under their control.

# Management objective: To increase the community's awareness, understanding and appreciation of the park and its management through the provision of appropriate information, signage, interpretation and education products.

Management strategies

- 1. Provide up-to-date and high-quality information, interpretation and education products and services to visitors, tourism industry, volunteers, educational bodies and local communities to promote the appreciation and understanding of key themes, values and management issues of the park, where relevant and appropriate. (**DBCA, CoB, SoD, SoH**)
- 2. Develop and implement a communication plan and interpretation plan for the regional park that examines appropriate information, interpretation and education opportunities for visitors. (DBCA, CoB, SoD, SoH)
- 3. Wherever possible, implement a consistent regional park sign system or park branding based on DBCA's *Regional Parks Sign Manual*. (DBCA, CoB, SoD, SoH)

# 20. Park access and accessibility

The provision and management of access to the park is an important part of this plan given that:

- uncontrolled access can degrade the natural environment and affect other visitors
- the park is close to urban areas
- the park has a high level of accessibility and demand for access
- the park is popular with visitors.

Accessibility to the park and recreation sites is proposed to be at least maintained at current levels, but may need to be improved, modified or restricted in some areas. Access within the park, which will be a key component of recreation planning (Section 18), will need to consider:

- ensuring that the park is accessible to all
- facilitating access to recreation sites
- providing access for management



- ensuring existing access is best located to satisfy access needs
- ensuring that where access is provided, the park environments can sustain the levels and types of access.

Fences and other barriers play a role in helping to prevent access by unauthorised vehicles and activities (such as horseriding, camping and boat launching), and will be built and maintained around parts of the park to help compliance. The provision of roads between adjacent development and the park can also help with managing access and providing a buffer to the park.



Pedestrian and vehicle access at Buffalo Beach. Photo – Lorna Charlton/DBCA

#### Parking

Limited parking is provided at many sites within the regional park, mainly at sites associated with recreational access and facilities, although the provision, quality and size of parking varies significantly. Parking may need to be developed or upgraded at some sites such as Shearwater Tuart Forest and Manea Park to improve accessibility to the park particularly for recreation. Four key issues relating to parking are:

- providing safe and convenient parking to facilitate access
- reducing the undesirable effects of uncontrolled and informal parking and access
- reducing the level of anti-social behaviour such as vandalism at parking areas in the park
- appropriate positioning of parking facilities to avoid environmentally sensitive areas.

Access, including parking, throughout the park will be addressed in further recreation planning (Section 18).

#### Management access

Managing agencies often access roads and tracks to conduct operations such as pest animal baiting, fire management, native plant and animal monitoring, weed control, rehabilitation, evacuation and other purposes, and during these times some access may need to be temporarily, permanently or seasonally closed to the public for management purposes. Where possible, maintenance vehicles will use existing access, although there may also be a need to build additional access in some areas for management purposes such as to improve fire management or provide boundary access. Access that is exclusively for management purposes will be signposted and/or physically closed by a gate, drain or natural barrier. Access tracks that are no longer needed for management purposes may be closed and rehabilitated to deter unauthorised use.

### Access for all

The park should be accessible to and inclusive of everyone in the community including people of all ages, abilities and cultural backgrounds to access, use and enjoy the park's natural areas and the associated facilities, services and information provided by managing agencies.

Several sites within the park have universal access such as the Tuart Walk, Buffalo Beach pathways and dual-use paths at Eaton Foreshore and Old Coast Road. Accessibility and the provision of universally accessible and inclusive facilities, services and information will be considered in recreation planning (Section 18).



Tuart Walk sealed pathway provides universal access through Shearwater Tuart Forest. Photo – Shem Bisluk/DBCA

# Management objective: To provide and maintain safe and structured access that facilitates visitor enjoyment and appreciation of, and minimises impacts on, the park.

- 1. Provide, maintain, monitor or otherwise manage safe and appropriate access in the park that is consistent with protecting park values and minimising environmental and visitor impacts, where relevant and appropriate. (DBCA, CoB, SoC, SoD, SoH)
- 2. Maintain licensed four-wheel drive vehicle access only at Turkey Point and Leschenault Peninsula Conservation Park on ocean beaches between low-water and high-water marks, subject to review by the relevant managing agency. (DBCA, CoB)
- 3. Prohibit the use of unauthorised vehicles, quad bikes or any other 'off-road vehicles' as defined under the *Control of Vehicles (Off-road Areas) Act 1978* and vehicles driving off roads and tracks in the park, except where formal approval is obtained from the relevant managing agency. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, WAPC)
- 4. Maintain formal boating access at current sites and levels within the park, subject to review by the relevant managing agency. (DBCA, CoB, SoD, SoH)
- 5. Where appropriate, ensure facilities, services and events are accessible and inclusive for all in accordance with Australian Standards. (DBCA, CoB, SoD, SoH)

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# 21. Commercial operations

Commercial concessions, such as licences and leases for commercial operations, provide opportunities for private businesses to offer tourism and recreation opportunities, facilities and services to the public. Appropriate concessions can also generate income to help offset regional park management costs and can significantly enhance public access and enjoyment of the park. Licences allow commercial operators to enter and use the park to conduct activities such as guided walks and tours, whereas leases allow the lessee to occupy land for commercial services that need exclusive rights of access and substantial infrastructure.

Concessions need to be carefully designed, assessed and managed to ensure that they do not detract from the conservation and landscape values of the park, and are consistent with the plan's objectives and guiding principles and the relevant land manager's policy, planning and other requirements. Leases and licences pertaining to land managed by a particular land manager need approval from that land manager. Some proposals, especially if they result in a permanent development, may need GBRS development approval. Advertising within the park also needs the approval of the relevant land manager.

Expression of interest processes for proponents of commercial concessions within the park will be publicly competitive and consistent with State and local government processes. Leases for recreation clubs and associations are not subject to the same processes.

Any leases within public water catchments must be consistent with DWER's water quality protection policies and any Drinking Water Source Protection Plans (Section 25). The Water Corporation reserves the right to licence its landholdings for commercial uses subject to all normal approvals processes.

## Concessions for visitor services

### Existing concessions

There are 99 commercial tour operators licensed to conduct a range of recreational activities in Leschenault Peninsula Conservation Park, although the number of operators that run tours or activities in the area may be much less.

### New concessions

Visitor demand for commercial services in the park is low, which may reflect the early planning phase for the park. However, there is the potential for commercial concessions for visitor services to be developed in the future, providing they are consistent with the provisions of this plan.

### Mobile traders

Mobile food vans, coffee vans, flowers and other mobile trader businesses operate at some sites around the park such as Pelican Point, Eaton Foreshore to Watson Reserve and Leschenault Estuary foreshore at Ridley Place and Christina Street. Although there is not a large demand, these businesses may continue to operate in the park, subject to the issuing of an appropriate licence/permit by the relevant managing agency.

### **Community and Special Events**

There may be occasional requests for the use of parts of the park for community and special events such as car rallies, rowing regattas, running events, exercise classes, filming, fund raising, festivals and weddings or private/other gatherings (Section 18). The appropriateness of such events within the park is affected by whether they are sensitively located, properly planned and managed, interfere with other visitors and resource-demanding on the managing agency, and will be assessed and approved by the relevant land manager. Gatherings requiring sole use of a site will need a booking with the relevant land manager. A concession arrangement (bond) may be needed between the event organiser and the managing agency for the right to use a site and to cover the operational and administrative costs incurred by the managing agency.

Management objective: To extend the range of services, facilities and experiences available through the involvement of private enterprise, consistent with other management objectives and the protection of park values.

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- 1. Evaluate, grant proposals for, and manage licences, commercial tourism leases and events consistent with State, DBCA and other land manager policy and guidelines, licence/lease conditions, plan objectives and guiding principles, the purpose of the park, and the protection of values, where relevant and appropriate. (DBCA, CoB, SoD, SoH, WC, DoC)
- 2. Where appropriate, allow for activities of community organisations and clubs that are consistent with land tenure purposes. (**DBCA**, **CoB**, **SoC**, **SoD**, **SoH**, WC, DoC)
- 3. Seek sources of potential income such as commercial opportunities, sponsorship, merchandising and product development, and concessions, where appropriate and consistent with the purpose of reserves. (DBCA, CoB, SoD, SoH)
- 4. Support, and liaise with local Noongar people and the <u>Western Australian Indigenous Tourism Operators Council</u> to foster and develop Noongar enterprises that meet the objective of protecting and conserving the natural and cultural values of the park such as cultural tours. (**DBCA**, WATOC, GKB, CoB, SoD, SoH)

# 22. Working with the community

Working with the community is an integral part of park operations. Community participation helps promote community awareness, appreciation and support for the protection and conservation of biodiversity and natural and cultural values as well as for park management and programs. Community participation expands park managers' work capabilities, knowledge and skills base, and fosters communication links, sense of place, understanding and value of the park within the community.

Neighbours and residents who live near the park can have a great impact on the park (positively and negatively), and it is important to seek the cooperation and involvement of nearby landowners to protect park values. This can be done through educational programs and communication strategies that promote responsible



The Friends of Manea Park community volunteers. Photo – Hendersons Photographics/South West Catchments Council

use of the park and inform the community of management roles and responsibilities, as well as through joint venture on-ground works.

The Regional Park Community Advisory Committee provides a forum at which issues affecting the park are discussed. The committee, which was established in 2019, consists of community members, and representatives from DBCA, local government and other agencies. The committee's role is to provide advice in implementing this plan and subsidiary plans for the park.

#### Management objective: To facilitate community participation in park management.

#### Management strategies

- 1. Maintain the Regional Park Community Advisory Committee in accordance with a Terms of Reference and Code of Conduct. (DBCA)
- 2. Coordinate the activities of volunteers in the park in liaison with community groups, including recording the number of registered volunteers and the amount of volunteer hours contributed, where relevant and appropriate. (**DBCA**, **CoB**, **SoD**, **SoH**)
- 3. Inform the community, groups and volunteers of management actions, programmes and developments within the park, where relevant and appropriate. (DBCA, CoB, SoC, SoD, SoH)

#### Key performance indicator

Performance measure	Target	Reporting
Number of volunteers registered with	Maintenance or increase in the numbers of volunteers and	Every five
DBCA and LGAs, and number of volunteer	number of volunteer hours contributed to park management	years
hours contributed to park management	from 2020 levels	

# Management operations and other uses

# 23. Mineral and petroleum exploration and development

### Mining

The park has known mineral deposits and potential for a range of heavy mineral sands, although there are no tenements that cover the regional park<sup>23</sup>. Any applications for mining within the park will be processed under the *Mining Act 1978*.

### Basic raw materials

There are different legislative requirements for mining or extraction of basic raw materials (BRM) (such as sand, limestone, clay, gravel and hard rock), depending on land tenure. Where BRM occurs on Crown land, mining for commercial purposes requires a mining lease issued under the Mining Act, which is administered by the Department of Mines, Industry Regulation and Safety (DMIRS). BRM that occurs on private (freehold) land is not covered by the Mining Act and requires an extractive industry licence and planning approval under the *Planning and Development Act 2005*.

Extractive industry proposals in areas with native vegetation are subject to the provisions of the *Environmental Protection Act 1986* for clearing applications. Proposals for extracting BRM from the regional park are likely to be deemed as having a significant effect on the environment and therefore are likely to be referred by the decision maker to the EPA for consideration.

Most requirements for BRM in the park will be from local government authorities, Main Roads WA or DBCA for use on roads, recreation sites and other purposes. BRM should be preferentially sourced from outside the park. When this is not feasible, BRM may be sourced from within the regional park for use within the park boundary.

Management objective: To minimise the impact of mineral and petroleum exploration and development, including BRM extraction, on park values.

Management strategies

- 1. Review and provide advice on the effect of exploration or development proposals on park values and seek to avoid or minimise these impacts. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, WAPC)
- 2. Refer or recommend referral of exploration or development proposals with the potential to have a significant environmental impact on the park to the EPA for consideration of assessment under the *Environmental Protection Act* 1986. (DBCA, CoB, SoD, SoH, WC, DoC, DPLH, DWER, WAPC)
- 3. Should proposals for mining or the extraction of BRM be approved, ensure adequate provisions are made to manage impacts and to protect the remaining areas of the park, where relevant and appropriate. (DBCA, CoB, SoD, SoH, WC, DoC, DPLH, DWER, WAPC)

# 24. Use of native plants and animals

### Firewood collection

Firewood collection is not allowed within the regional park, except on DBCA-managed lands for 'customary activities' purposes (Section 16). Approved public <u>firewood collection</u> is only allowed from gazetted firewood

<sup>23</sup> To view various resources datasets, including operating mines, mining tenements and mineral deposits see DMIRS's <u>GeoVIEW.WA</u> online interactive mapping system.

areas in nearby areas of State forest under the conditions of a fee payable permit issued by DBCA. Commercial firewood operations are managed through contracts administered by the Forest Products Commission. Unlawful removal of firewood (including dead wood) occurs in the park, and this can lead to damage or loss of vegetation cover and habitat integrity, soil compaction and the spread of plant diseases. Firewood is supplied at Belvidere campground fireplaces and occasionally at The Cut. Visitors are encouraged to bring and use their own gas fuel cookers or the gas barbecues provided, unless a total fire ban has been declared.

### Wildflowers and other native plants

Commercial picking of native plants is not permitted in DBCA-managed conservation reserves. The collection of native seed may occur within the park with an appropriate <u>flora licence</u>, where community groups, farmers, mining companies and nurseries use native seed for revegetation, rehabilitation and propagation projects.

### Native animals

Under the Biodiversity Conservation Act, DBCA is responsible for the regulation of commercial gain associated with protected native animals in WA on all private property and Crown lands. DBCA administers the taking, farming, killing, processing, transport and sale of native animals, including the commercial harvesting of kangaroos and emus, and the keeping and breeding of birds (aviculture), reptiles and amphibians as a hobby, in accordance with an appropriate <u>fauna licence</u>.

### Beekeeping

There are no beekeeping sites within the park. Given the proximity of the park to residential areas and the current and potentially high visitation to the park, no permits will be granted for beekeeping within the park.

### Management objective: To facilitate the sustainable use of native plants and animals.

#### Management strategies

- 1. Manage the taking and public or commercial use of native plants and animals in accordance with relevant legislation, policies and guidelines, and licensing systems. (**DBCA**, CoB, SoC, SoD, SoH, DoC, WC, DWER, WAPC)
- 2. Allow the taking or removal of forest produce, with conditions if necessary, in accordance with a licence issued by DBCA for (i) removal of exotic plants, (ii) removal for therapeutic, scientific or horticultural purposes, and (iii) essential works. (DBCA)
- 3. Exclude beekeeping activities from the park. (DBCA, CoB, SoC, SoD, SoH, DoC, WC, DWER, WAPC)

# 25. Water resources

Through the *Water Agencies (Powers) Act 1984<sup>24</sup>*, DWER leads water resource management in WA by coordinating cross-government efforts to protect and manage water resources. Other water legislation also supports the sustainable management of water resources.

### Water abstraction

The *Rights in Water and Irrigation Act 1914* (RIWI Act) provides for the regulation, management, use and protection of water resources through a licensing system for taking water and a permit system for activities that may damage, obstruct or interfere with water flow or the beds and banks of watercourses and wetlands in proclaimed rivers, surface water management areas and irrigation districts. Proclaimed areas covering the park are the Collie River Irrigation District, Brunswick River and Tributaries and Preston River and Tributaries surface water areas, and the Bunbury and South West Coastal groundwater areas (Section 7). The Bunbury Groundwater Area is an important source of drinking water for the greater Bunbury area. DWER's approach to allocation and licensing is set out in the *South West Groundwater Allocation Plan* (DoW 2009a) and the subarea reference sheets (DoW 2009b), and background information and challenges to managing the region's water resources are set out in the *South West Plan 2010–2030* (DoW 2010).

Proponents of proposals for water abstraction from surface or underground waters of the park need a licence from DWER. To be licensed, the proponent also needs approval from the land manager to access the land for abstracting water. For access to CALM Act lands, DBCA may, after consultation with the Conservation and Parks

<sup>&</sup>lt;sup>24</sup> Water resources management legislation in WA is under review and may change during the life of this plan.

Commission and approval from the Minister for Environment, issue a permit to authorise access. Where infrastructure is needed, a lease may also be issued.

#### Water protection

The *Country Areas Water Supply Act* 1947<sup>25</sup> and associated by-laws protect the State's Public Drinking Water Source Areas (PDWSA)<sup>26</sup> such as proclaimed catchment areas, water reserves and pollution areas. The only PDWSA within the park is the 'Bunbury Water Reserve', which covers Maidens Reserve, Shearwater Tuart Forest, Tuart Brook/Five Mile Brook, Hay Park and part of Manea Park (at College Grove). The *Bunbury Water Reserve Drinking Water Source Protection Plan* (DoW 2008a) establishes the level of protection needed within the Bunbury Water Reserve.

Water Corporation manages two water supply bores in Bunbury Water Reserve within Shearwater Tuart Forest, which supply water to Dalyellup. Each bore has a 300m radius Wellhead Protection Zone (WPZ), which are declared around wellheads in public drinking water source areas to protect the groundwater from immediate contamination risks. Aqwest manages a water supply bore that has a WPZ partly extending over Hay Park. Within WPZs, by-laws may prohibit, restrict or approve defined land uses and activities to prevent water source contamination or pollution. Water Corporation infrastructure associated with the drinking water bores supplying the Dalyellup area (including the access road to bores and the Treatment Plant) is located within Shearwater Tuart Forest. Formalisation of access arrangements may need to be considered for these specific areas. The Water Corporation, Aqwest and DWER should be notified of any planned developments or works that will cross pipeline easements or affect public drinking water source wellheads and their buffer zones, and approval is to be gained before starting works.

Under the *Waterways Conservation Act 1976* (WWC Act), waterways in need of coordinated management can be declared as 'management areas'. DWER administers the WWC Act and actively licences a range of activities within the declared management areas and waterways within parts of the regional park, including retaining wall construction licences, dewatering licences, reclamation licences, dredging licences, disposal licences, and private boat ramp licences (outside DoT management area).

#### Wastewater treatment

Access to the Bunbury Wastewater Treatment plant, located on reserve 37116 and managed by the Water Corporation, is through Shearwater Tuart Forest. The buffer area (or separation distance) for the wastewater treatment plant is implemented through a special control area (SCA) in the GBRS (SCA No. 4 *Wastewater Treatment Plant Odour Buffer area*) which extends north to Reserve 670 (Maidens Reserve) and east to Ocean Drive. The Water Corporation is to be consulted about any planned developments or works within this buffer area that will affect the wastewater treatment plant.

#### Management objective: To minimise the impact of water resource use on park values.

#### Management strategies

- 1. Where appropriate, assess the potential impact from new or upgrading of existing water resource use proposals, and recommend appropriate conditions and refer proposals to DWER. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DPLH, WAPC)
- 2. Ensure permits for the extraction of water are consistent with the objectives of this plan. (DWER, DBCA, CoB, SoC, SoD, SoH, WC, DoC, DPLH)
- 3. Liaise with relevant water resource stakeholders and monitor activities to ensure that water use complies with conditions of approval. (DWER)
- 4. Ensure water resource use operations consider the responsible management of fire, weeds, pest animals and diseases. (DWER, WC, Aqwest)

#### 26. Utilities and services

Public utilities provide essential community infrastructure, but the building and subsequent maintenance of infrastructure and associated access can have significant visual and environmental impacts. The impact of utilities or services and associated infrastructure can be minimised by:

<sup>25</sup> As well as the *Metropolitan Water Supply, Sewerage and Drainage Act 1909.* 

<sup>26</sup> PDWSAs may have constraints placed on land use, development, public access and land/water-based activities.

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- avoiding the placement of new and relocated infrastructure within the park, but when this is unavoidable, the use of already degraded areas, pre-existing corridors or co-location with existing infrastructure is preferred
- where necessary, relocating infrastructure to existing utility corridors or sites to ensure minimal impact, or encouraging alternative low-impact methods of providing services
- accommodating requests for the placement of temporary radio masts, subject to assessment of potential impacts
- removing infrastructure (except where it is considered to have other value) and rehabilitating the site, if utilities and services are no longer needed (Section 15)
- where there is no other viable alternative, seek an alternative appropriate land category/managing authority or excise the land containing utility and service infrastructure from the park.

This plan does not restrict access for providers to maintain existing utilities and services or associated infrastructure, however permission is needed from the relevant land manager for access. The maintenance of existing infrastructure must consider sensitive sites such as wetlands, significant habitat areas and places of cultural significance. Access can lead to the spread of weeds and disease and therefore appropriate hygiene practices must be employed.

The provision of new recreation facilities will be limited to locations where they do not conflict with the operational requirements of infrastructure providers.

#### Specific infrastructure<sup>27</sup>

The Picton to Marriott Road 132kV powerline crosses the Collie River and the park in the Roelands area. The Picton to Bunbury Harbour132kV powerline crosses the Preston River link. High voltage overhead powerlines traverse the park in Shearwater Tuart Forest (to access the Bunbury Wastewater Treatment plant), Preston River Link, Turkey Point, Pelican Point, Australind reserves, Leicester Reserve and Wardandi Reserve. Some underground power cabling also occurs in the park. Overhead powerlines generally have a significant impact on landscape value. Wherever possible, mains power lines should be placed underground or in such a way that there is minimal visual impact. Where feasible, power supplies for facilities in the park should be from alternative renewable energy sources such as solar power.

The Dampier to Bunbury underground gas pipeline crosses the park and the Collie River in the Roelands area. <u>Dampier Bunbury Pipeline</u> operate the pipeline under an access arrangement approved by the Economic Regulation Authority.

Road infrastructure (roads or tracks) within the park may be located on road reserves or within other Crown reserves managed by local government authorities or other managing agencies. Road infrastructure not only provides access but also helps provide a buffer between existing or future, residential or industrial development and the park.

Telecommunication infrastructure is generally not considered appropriate within the park unless there is a considerable benefit to the park, or they comprise a historical land use. Development proposals for telecommunications infrastructure are to comply with WAPC's <u>State Planning Policy 5.2 - Telecommunications</u> <u>infrastructure</u>.

The park also contains a range of other infrastructure such as boat ramps, lighting, bores, training walls and stormwater pipes and basins. The ongoing maintenance and management responsibility for these will vary depending on the type and purpose of the infrastructure.

#### Leases

Cristal Pigment (Tronox) have a Crown lease on the portions of Lot 350 on Plan 72934 Australind that are within the regional park, for the manufacture of titanium dioxide products and associated processes. The lease was renewed in January 2012 for a term of five years with the option of four more terms of five years. Infrastructure that Cristal will continue to access includes pipelines, water treatment and paint exposure testing facilities on the lease, monitoring bores within the WAPC freehold land to the north and UCL to the east, and a noise monitoring station within the WAPC freehold land to the north.

<sup>&</sup>lt;sup>27</sup> Utilities and services associated with water are covered in Section 25.

There are no current leases for primary production on Crown reserves managed by DBCA, local governments or other managing agencies, although primary production does occur on private property in the park including freehold land held by the Shire of Harvey. New primary production leases for the agistment of animals may be considered in certain cleared and degraded areas of the park as a method of minimising fire fuel loads (Section 10) and keeping weeds under control (Section 11) until areas are rehabilitated or future land use is confirmed.

#### Servicing and maintenance of the park

Some parts of the park and their facilities/infrastructure may need regular monitoring and maintenance, and responsibilities for this will vary depending on the type of infrastructure and park area. Where agencies responsible for the maintenance and management of facilities/infrastructure are not the land management agency, relevant access approvals will need to be obtained from land management agencies.

Management objective: To minimise the impact of utilities and services in the park and provide safe, cost-effective park services.

Management strategy

1. Liaise with infrastructure providers, development proponents and other relevant stakeholders to ensure that an environmental management and rehabilitation program accompanies utilities or services and associated infrastructure proposals in the park including consideration of appropriate conditions, monitoring and rehabilitation, where relevant and appropriate. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, DPLH, WAPC)

#### 27. Plan implementation

#### Term of the plan

Once finalised, this plan will guide the management of the regional park for 10 years from the date the plan is gazetted. During this time, amendments to the management plan may be made in accordance with section 61 of the CALM Act, which includes public notification of plan amendments under section 57 of the CALM Act.

If the plan is not reviewed and replaced by the end of the 10-year period, this plan will remain in force until a new plan is approved, as specified under section 55(2) of the CALM Act.

#### Subsidiary plans and implementation programs

More detailed subsidiary plans or other guidance will be prepared to guide implementation of this plan. Subsidiary plans that may be (or already have been) prepared include:

- Fire management plan (Section 10)
- Weed control plan (Section 11)
- Pest animal control plan (Section 11)
- Recreation master and/or site plans (Section 18)
- Communication plan, which includes an interpretation plan (Section 19).

Annual operations or works plans will be prepared by managing agencies to guide the implementation of this plan for the areas of the park that agencies manage. Managing agencies, as well as the Regional Park Community Advisory Committee and other relevant stakeholders (which may include the community), will be consulted where major projects in the park are proposed.

Park managers will implement the plan for areas that they control where possible in light of available staff, contractors, finances and other resources. Funding for the acquisition of private property proposed for inclusion in the park rests with the WAPC.

#### Improvement in knowledge

Improved management of the park and its values can result from a better understanding of values and management issues, which can be gained through research and adaptive management. There is significant interest in the park and its values from environmental, scientific and educational institutions and communities, and these groups are encouraged to be involved in research projects that provide valuable scientific knowledge for park management. Important knowledge can also be gained from operational observations and trials by park managers and can be used to improve management practices in an adaptive management framework.

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Management objectives: To manage the park according to the priorities developed for implementation. To increase knowledge and understanding of park values and management issues to inform and improve management.

Management strategies

- 1. Ensure that annual operations plans or works plans consider the priorities identified in this plan and any subsidiary plans. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER, WAPC)
- 2. Prepare subsidiary plans or other guidance where needed to guide operational activities. (**DBCA**, CoB, SoC, SoD, SoH, WC, DoC, DWER)
- 3. Consult with managing agencies, the Regional Park Community Advisory Committee and other relevant stakeholders where major projects in the park are proposed. (DBCA, CoB, SoC, SoD, SoH, WC, DoC, DWER)
- 4. Support, encourage, record and where necessary undertake research and monitoring that facilitates management, establishes baseline information and contributes to management objectives, and adapt future management where appropriate. (DBCA, CoB, SoD, SoH, DWER)

#### 28. Performance assessment and monitoring

Defining KPIs in management reflects the need for park managers to take an outcome-based approach from which the effectiveness of management can be assessed. KPIs in this plan do not cover all objectives or strategies but have been selected to give a strategic indication of how well the key values of the park are being maintained. KPIs have been identified for the following sections of the plan (Appendix 1):

- Native plants and ecological communities (Section 8)
- Fire (Section 10)
- Weeds and pest animals (Section 11)
- Noongar cultural heritage (Section 16)
- Visitor use and planning (Section 18)
- Working with the community (Section 22).

KPIs underpin the audit process of this plan. The Conservation and Parks Commission has responsibility for assessing the implementation and success of this plan in accordance with section 19(1)(g)(iii) of the CALM Act.

Management objective: To monitor and report on the implementation of this plan to track its effectiveness in meeting its objectives.

Management strategies

- 1. Monitor the KPIs and collate and report findings to the Conservation and Parks Commission as needed. (DBCA)
- 2. Assess and report on the overall effectiveness of park management based on the KPIs. (Conservation and Parks Commission)

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Many of the following references are either available on the internet or are publicly available (or can be requested) through DBCA's Library at Kensington. <u>DBCA policies</u> and <u>Conservation and Parks Commission position</u> <u>statements</u> are also available on the internet.

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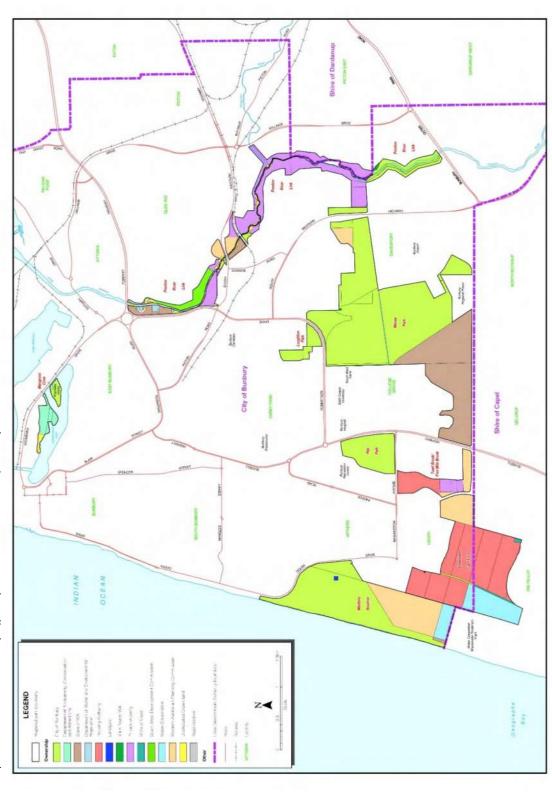
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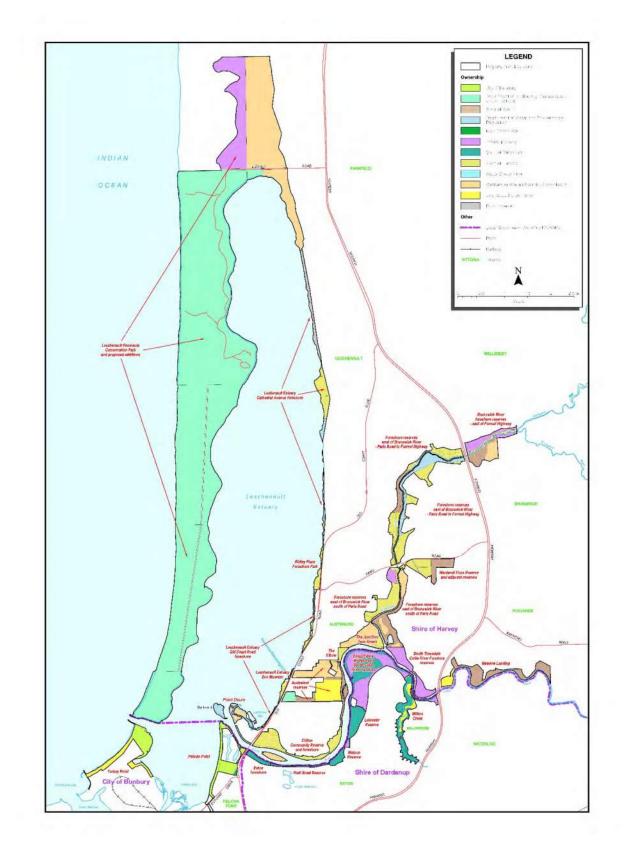
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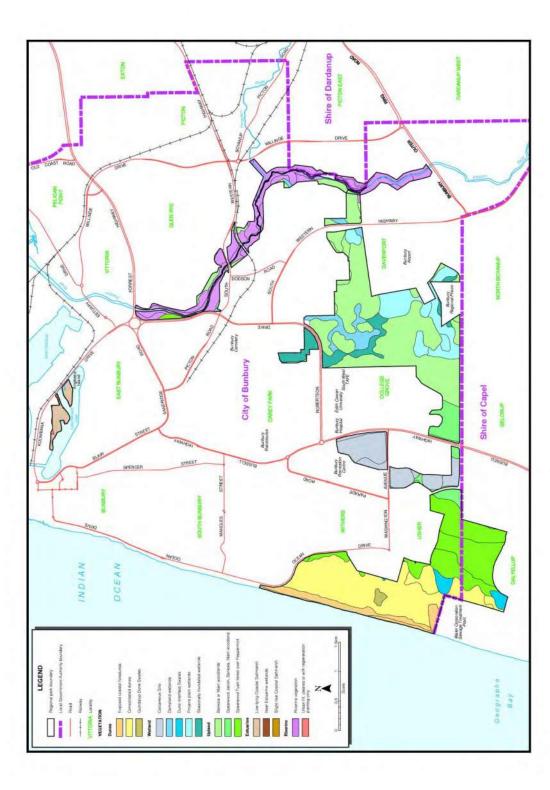
Map 2a. Land ownership (pre-park establishment) and park areas - south

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Map 2b. Landownership (pre-park establishment) and park areas - north

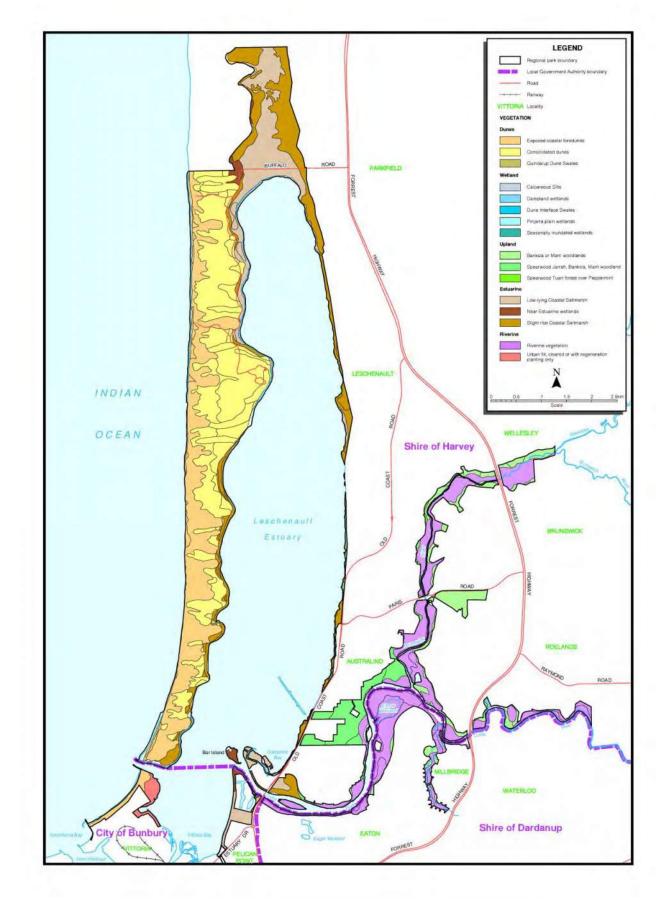


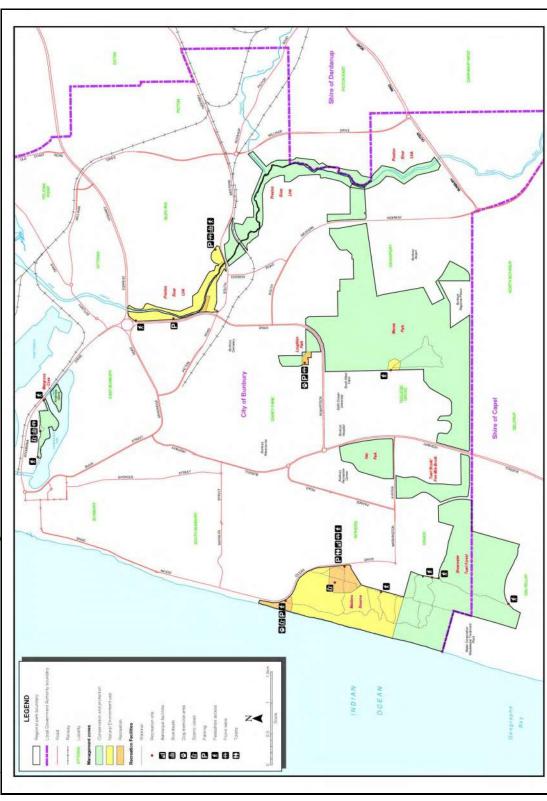
Map 3a. Vegetation - south



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Map 3b. Vegetation - north

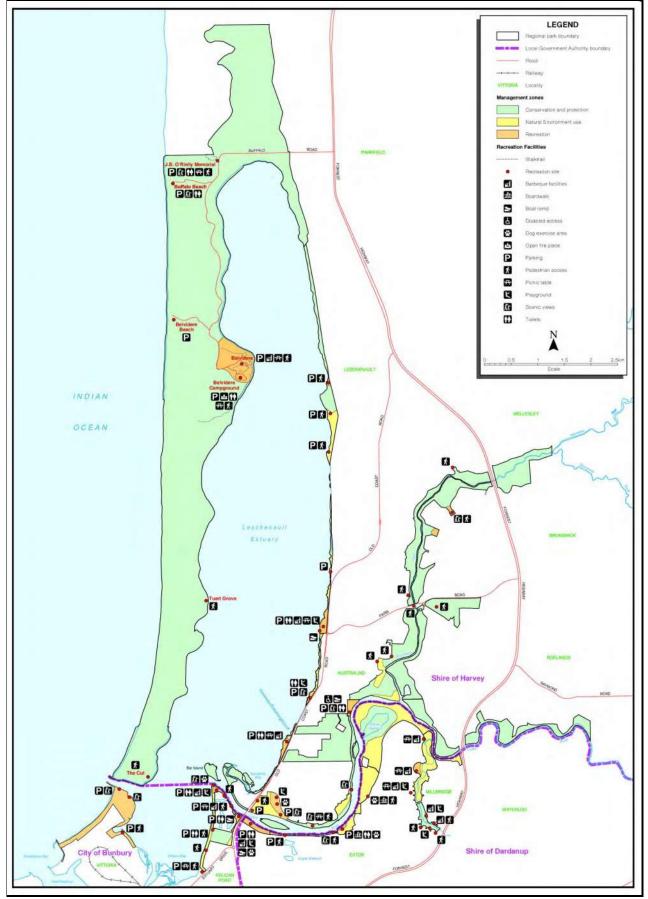




Map 4a. Recreation, access and management zones - south

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# Appendix 1. Performance assessment

Key values	Key objectives	Key Pe	Key Performance Indicators	
		Performance measure	Target	Reporting
Section 8 Native plants and vegetation				
threatened native plant species and threatened ecological communities (TECs) of regional, State and national significance	To conserve the habitat and populations of native plants, including populations of threatened and other significant plants and ecological communities	Selected threatened plant populations and ecological community occurrences	Less than five percent decrease in the number of occurrences or populations of selected threatened plants and ecological communities	Every five years, or as per recovery plans if applicable
Section 10 Fire				
	To manage fire to protect and conserve biodiversity and natural values, while protecting life and property from bushfire	Fire management plan for the park that proposes fire prevention, preparedness, response and recovery measures to reduce the risk of bushfire to life, community and park values and maintain ecologically appropriate fire regimes	Fire management plan for the park is developed, and implemented in accordance with the plan	Every five years
Section 11 Weeds and pest animals				
	To minimise the negative impacts of weeds and pest animals on the park	Control plans that prioritise the control of weeds and pest animals	Weed and pest animal control plans for the regional park are developed, and implemented in accordance with the plans	Every five years
Section 16 Noongar cultural heritage				
registered Aboriginal sites of archaeological, mythological, ceremonial, cultural and spiritual significance	To identify and protect significant Aboriginal places and values. To involve Noongar people in managing the park. To improve understanding of the Noongar heritage values of the park	Protection of Aboriginal heritage sites	No disturbance of registered Aboriginal heritage sites because of park management operations without formal approval and consultation through the GKB/SWALSC NSHA process.	Annually
Section 18 Visitor use and planning				
highly engaged and interested urban community consisting of volunteers, community groups, visitors, neighbours and residents	To provide and manage a range of safe, quality and minimal-impact recreation sites, facilities and activities	Number of visits (as measured by DBCA) to selected recreation sites	Level of visitation at selected recreation sites to be maintained or increased from 2020 levels	Every five years
Section 22 Working with the community				

# (Appendix ORD: 12.11A)

Every five years Maintenance or increase in the numbers of volunteers and number of volunteer hours contributed to park management from 2020 levels Number of volunteers registered with DBCA and LGAs, and number of volunteer hours contributed to park management To facilitate community involvement in the management of the park community consisting of volunteers, community groups, visitors, neighbours and residents highly engaged and interested urban

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(Appendix ORD: 12.11A)

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# Appendix 2. Schedule of land for inclusion in the regional park

Commonte/aronacal?			To be vested in Conservation and Parks Commission <sup>29</sup>	To be vested in Conservation and Parks Commission	To be vested in Conservation and Parks Commission	To remain vested in Bunbury Water Corporation (Aqwest)	To be vested in Conservation and Parks Commission	To remain vested in City of Bunbury	To be amalgamated with City of Bunbury drainage reserve (R46486)	To be vested in Conservation and Parks Commission	To be vested in Conservation and Parks Commission								
	רמוג מופמ		Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Manea Park	Loughton Park	Loughton Park	
	raiin	type	NCL	Crown	Crown	Crown	Crown	Crown	Crown	Crown	Crown	Crown	freehold	Crown	Crown	freehold	Crown	Crown	
		Purpose(s)	Vacant land - residential	Rifle range	Parklands, recreation	Pipeline, water supply	Parklands, recreation	Endowment	Endowment	Endowment	Endowment	Endowment		Golf	Drainage, recreation		Public recreation	Public recreation	
	eselve	Vesting <sup>1</sup>		Unmanaged reserve	City of Bunbury	Aqwest - Bunbury Water Corporation	City of Bunbury	City of Bunbury (MO)		City of Bunbury (MO)	City of Bunbury		City of Bunbury	City of Bunbury					
	CIUMITESEIVE	No.		16044	32963	36316	32963	670	670	670	670	670		40664	46486		32719	32722	
Outpour of the			State of WA	State of WA	State of WA	State of WA	State of WA	State of WA	State of WA	State of WA	State of WA	State of WA	WAPC	State of WA	State of WA	Commissioner of Main Roads	State of WA	State of WA	
Aroo.	AIGA	(ha)	60.38	56.61	100.06	1.19	80.72	3.74	3.73	6.05	16.39	10.81	7.22	48.73	1.52	0.14	6.22	6.62	
	rocality		College Grove	College Grove	College Grove	College Grove	College Grove	College Grove	Davenport	Davenport	Davenport	Davenport	Davenport	Davenport	Davenport	Davenport	Carey Park	Carey Park	
	LULIIU. & PIAII (P)	or diagram (D) of survey (PIN <sup>28</sup> )	9000 on P61603 (11800241) part	937 on P220462 (1295992)	506 on P74949 (12009787) part	935 on P220463 (1295987)	939 on P220463 (1295989)	1051 on P33288 (11049624)	1085 on P39511 (11239002) part	1050 on P33291 (11051601) portion	1052 on P33287 (11050142) part	505 on P74949 (12009786) part	417 on P47943 (11515236)	570 on P408588 (12242052)	6092 on P19647 (1100467) part	91 on P19647 (1100468) part	567 on D541565 (499626)	568 on P215947 (499576) part	•
< (	FGA		Bunbury																

# (Appendix ORD: 12.11A)

<sup>&</sup>lt;sup>28</sup> PIN = Property Identifier Number. <sup>29</sup> Lands that are vested in the Conservation and Parks Commission are managed by DBCA on behalf of the Conservation and Parks Commission in accordance with the CALM Act.

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IGA	I of no & plan (P)	Locality	Area	Ownershin	Crown reserve	Serve		land	Park area	Comments/proposal <sup>2</sup>
	or diagram (D) of survey (PIN <sup>28</sup> )		(ha)	-	No.	Vesting <sup>1</sup>	Purpose(s)	type		
	617 on P12039 (499577)	Carey Park	2.45	State of WA	32722	City of Bunbury	Public recreation	Crown	Loughton Park	Cleared area to remain with City of Bunbury, bushland area to be vested in Conservation and Parks Commission
	3 on D30204 (500206) part	Usher	1.85	private				freehold	Tuart Brook/Five Mile Brook	Subject to future planning considerations including Tuart Brook Structure Plan
	4 on D30204 (500205) part	Usher	1.84	private				freehold	Tuart Brook/Five Mile Brook	Subject to future planning considerations including Tuart Brook Structure Plan
	8 on D75424 (500203) part	Usher	3.66	private				freehold	Tuart Brook/Five Mile Brook	Subject to future planning considerations including Tuart Brook Structure Plan
	802 on P65631 (11919150) part	Usher	18.2	DoC - Housing Authority				freehold	Tuart Brook/Five Mile Brook	Subject to future planning considerations including Tuart Brook Structure Plan
	632 on P183835 (500204)	Usher	8.91	WAPC				Crown	Tuart Brook/Five Mile Brook	To be vested in Conservation and Parks Commission
	632 on P183835 (500201) part	Usher	1.3	WAPC				Crown	Tuart Brook/Five Mile Brook	To be vested in Conservation and Parks Commission
	632 on P183835 (500187)	Usher	21.97	WAPC				Crown	Shearwater Tuart Forest	To be vested in Conservation and Parks Commission
	2001 on P31675 (11023817)	Usher	14.45	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
	450 on P302624 (11400768)	Usher	13.63	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
	451 on P302624 (11400767)	Usher	13.57	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
	452 on P302624 (11400766)	Usher	13.03	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
Bunbury, Capel	303 on P3097 (500184)	Usher	26.91	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
4	(11406941) part	Usher	2.59	City of Bunbury and Shire of Capel			Public road (portion Ocean Drive)	road reserve	Shearwater Tuart Forest	To remain with City of Bunbury, Shire of Capel portion subject to further considerations
	304 on P3097 (500183)	Dalyellup	28.29	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
	2 on D89772 (1157632) part	Dalyellup	32.03	Water Corporation			Pump station	freehold	Shearwater Tuart Forest	To remain with Water Corporation
Capel	9001 on P28038 (1369026)	Dalyellup	0.64	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
	9001 on P28038 (1369027)	Dalyellup	0.15	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities

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LGA	Lot no. & plan (P)	Locality	Area	Ownership	Crown reserve	eserve		Land	Park area	Comments/proposal <sup>2</sup>
	or diagram (D) of survey (PIN <sup>28</sup> )	1	(ha)		No.	Vesting <sup>1</sup>	Purpose(s)	type		
	9003 on P28038 (1369034)	Dalyellup	27.07	DoC - Housing Authority				freehold	Shearwater Tuart Forest	Subject to further consideration by Department of Communities
	5000 on P56132 (11714952)	Dalyellup	0.65	State of WA	46267	Shire of Capel (MO)	Drainage	Crown	Shearwater Tuart Forest	To remain with Shire of Capel
	1 on D94794 (1232243)	Usher	11.82	Water Corporation				freehold	Maidens Reserve	To remain with Water Corporation
Bunbury	(11200626)	Usher	1.01	State of WA				NCL	Maidens Reserve	To be vested in Conservation and Parks Commission
	626 on P183497 (500015)	Usher	54.21	WAPC				freehold	Maidens Reserve	To be vested in Conservation and Parks Commission
	1180 on P33518 (11074212)	Withers	113.61	State of WA	670	City of Bunbury (MO)	Endowment	Crown	Maidens Reserve	City of Bunbury to retain Mindalong car park, remainder to be vested in Conservation and Parks Commission
	1179 on P33518 (11058425)	Withers	0.41	State of WA	11998	WA Land Information Authority (Landgate)	Trigonometrical station	Crown	Maidens Reserve	To be vested in Conservation and Parks Commission
	613 on P182781 (492993)	Withers	12.08	State of WA	35020	City of Bunbury	Public recreation, toilets	Crown	Maidens Reserve	City of Bunbury to retain cleared active recreation area, remainder to be vested in the Conservation and Parks Commission
	614 on P182781 (492994)	Withers	0.04	State of WA	35449	Water Corporation	Sewage pumping	Crown	Maidens Reserve	To remain with Water Corporation
	3001 on P43554 (11362986) part	Withers	41.76	State of WA	30601	City of Bunbury	Recreation, club, hall, sports complex, youth centre	Crown	Hay Park	City of Bunbury to retain Bussell Hwy layby, remainder to be vested in Conservation and Parks Commission
	633 on P184054 (499953)	Withers	0.01	State of WA	36803	Water Corporation	Sewage pumping	Crown	Hay Park	To remain with Water Corporation
	5 on D50137 (499916) part	Davenport	7.85	Rawling Road Pty Ltd				freehold	Preston River Link	N/A
	1 on D12060 (499913) part	Davenport	16.05	Rawling Road Pty Ltd				freehold	Preston River Link	N/A
	(11580420) part	East Bunbury	0.21	State of WA				NCL	Preston River Link	Subject to further planning & land use considerations
	(11580417) part	East Bunbury	0.74	State of WA				NCL	Preston River Link	Subject to further planning & land use considerations, including South Moorlands Structure Plan
	31 on P808 (11421160)	East Bunbury	0.43	State of WA				freehold	Preston River Link	Subject to further planning & land use considerations
	31 on P808 (11421158)	East Bunbury	2.23	State of WA				freehold	Preston River Link	Subject to further planning & land use considerations
	792 on D29960 (494114)	East Bunbury	0.76	State of WA	43612	City of Bunbury	Public recreation	Crown	Preston River Link	To remain with City of Bunbury

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LGA	Lot no. & plan (P)	Locality	Area	Ownership	Crown reserve	serve		Land	Park area	Comments/proposal <sup>2</sup>
	or diagram (D) of	)	(ha)		No.	Vesting <sup>1</sup>	Purpose(s)	type		-
	survey (PIN <sup>28</sup> ) (1301697) part	East	0.21	City of Bunbury			Public road	road	Preston River Link	To remain with City of Bunbury
	1	Bunbury		, ,				reserve		
	507 on D23148 (494133)	East Bunbury	0.01	State of WA	30116	City of Bunbury	Drainage	Crown	Preston River Link	To remain with City of Bunbury
	30 on P808	East	0.89	Water				freehold	Preston River Link	Subject to further planning & land use
	(11421161) part	Bunbury		Resources						considerations
				Body						
	32 on P808	East	0.29	Water				freehold	Preston River Link	Subject to further planning & land use
	(11421159) part	Bunbury		Resources						considerations
				Body						
	3 on D36038	Glen Iris	0.73	Water				freehold	Preston River Link	Subject to further planning & land use
	(490396) part			Resources						considerations
				Ministerial Bodv						
	4 on D42434	Glen Iris	0.39	Water				freehold	Preston River Link	Subject to further planning & land use
	(490404) part			Resources						considerations
				Ministerial Bodv						
	41 on P2144	East	0.02	private				freehold	Preston River Link	N/A
	(1146/233)		101	V 111 0						
	0 on P3833 (11561060) part	Clen Iris	4.00	State of WA				Ireenold	Preston Kiver Link	Subject to further planning & land use considerations
	501 on D34014	Glen Iris	0.40	State of WA	29721	unmanaged	Drainage	Crown	Preston River Link	Subject to further planning & land use
	(490403) part					reserve	0			considerations, including South
										Moorlands Structure Plan
	(11580408)	Glen Iris	0.26	State of WA				NCL	Preston River Link	Subject to further planning & land use
										considerations, including South
	(11580409)	Glen Iris	0.98	State of WA				UCL	Preston River Link	Subject to further planning & land use
										considerations, including South
										Moorlands Structure Plan
	(11580416)	Glen Iris	0.30	State of WA				NCL	Preston River Link	Subject to further planning & land use
										collsiderations
	34 on P409640 (12287724)	Glen Iris	0.25	State of WA				UCL	Preston River Link	Subject to further planning & land use considerations
	50 on D2965 (11558422) part	Glen Iris	0.002	State of WA				freehold	Preston River Link	Subject to further planning & land use considerations
	141 on P39512 (11238202) nart	Glen Iris	4.08	WAPC				freehold	Preston River Link	To be vested in Conservation and Parks Commission
	141 on P39512	Glen Iris	3.75	WAPC				freehold	Preston River Link	To be vested in Conservation and
	(11238203) part									Parks Commission

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LGA	Lot no. & plan (P)	Locality	Area	Ownership	Crown reserve	serve		Land	Park area	Comments/proposal <sup>2</sup>
	or diagram (D) of survey (PIN <sup>28</sup> )	)	(ha)		No.	Vesting <sup>1</sup>	Purpose(s)	type		-
	200 on P63117 (11843011)	Glen Iris	3.15	State of WA	50481	unmanaged reserve	Foreshore management	Crown	Preston River Link	Future tenure is subject to consideration under the South West Native Title Settlement
	(11580411)	Glen Iris	0.48	State of WA				UCL	Preston River Link	Subject to further planning & land use considerations, including potential amalgamation with Lot 200 subject to South West Native Title Settlement
	27 on P2155 (12003407) part	Glen Iris	60.0	State of WA				ncr	Preston River Link	Subject to further planning & land use considerations, including potential amalgamation with Lot 200 subject to South West Native Title Settlement
	704 on P14391 (494117)	Glen Iris	0.2	State of WA	40578	City of Bunbury	Public recreation	Crown	Preston River Link	To remain with City of Bunbury
	5458 on P186979 (499923)	Glen Iris	0.18	State of WA	39701	City of Bunbury	Parklands, recreation	Crown	Preston River Link	To remain with City of Bunbury
	(11580412)	Davenport	1.59	State of WA				NCL	Preston River Link	Subject to further planning & land use considerations
	(11580414)	Davenport	0.92	State of WA				NCL	Preston River Link	Subject to further planning & land use considerations
	5636 on D78059 (1020911) part	Davenport	1.05	State of WA	42566	City of Bunbury	Parklands, recreation	Crown	Preston River Link	To remain with City of Bunbury
	1059 on P32797 (11057358) part	Davenport	0.1	State of WA	42566	City of Bunbury	Parklands, recreation	Crown	Preston River Link	To remain with City of Bunbury
	123 on P71853 (11980439)	Davenport	10.2	State of WA	31866	City of Bunbury	Parklands, recreation	Crown	Preston River Link	To remain with City of Bunbury, may be reviewed if Structure Plan to north progressed
	126 on P71854 (11980445)	Davenport	3.05	State of WA	45201	City of Bunbury	Drainage	Crown	Preston River Link	To remain with City of Bunbury, may be reviewed if Structure Plan to north progressed
	121 on P71853 (11980435)	Davenport	1.21	State of WA	31866	City of Bunbury	Public recreation	Crown	Preston River Link	To remain with City of Bunbury, may be reviewed if Structure Plan to north progressed
	120 on P71852 (11963553) part	Davenport	5.45	City of Bunbury				freehold	Preston River Link	To remain with City of Bunbury, may be reviewed if Structure Plan to north progressed
	74 on P40593 (11265746) part	Davenport	13.41	ATG Geraldton Pty Ltd				freehold	Preston River Link	N/A
	313 on P43713 (11374820)	Davenport	11.73	South West Development Commission				freehold	Preston River Link	Subject to further planning & land use considerations, including South Moorlands Structure Plan
	104 on P403618 (12120803) part	Davenport	0.47	Commissioner of Main Roads				freehold	Preston River Link	To remain with MRWA
	1030 on P30054 (1390858)	Glen Iris	0.05	State of WA			Public road	road reserve	Preston River Link	To remain with City of Bunbury

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Comments/proposal <sup>2</sup>	-	To remain with City of Bunbury	City of Bunbury to retain portion south of Collie River, portion north of river to be vested in Conservation and Parks Commission	To remain with City of Bunbury	To remain with City of Bunbury	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Portion adjacent to Kaeshagen reserves (Lots 141) to be vested in Conservation and Parks Commission, remainder subject to further planning & land use considerations	N/A	N/A	N/A	Subject to further planning & land use considerations	N/A
Park area		Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link	Preston River Link
Land	type	freehold	road reserve	road reserve	road reserve	freehold	freehold	freehold	freehold	freehold	freehold	freehold	freehold	ncr	freehold	freehold	freehold	NCL	freehold
	Purpose(s)		Public road	Public road	Public road														
Crown reserve	Vesting <sup>1</sup>																		
Crown	No.																		
Ownership		City of Bunbury	City of Bunbury	City of Bunbury	City of Bunbury	private	private	private	private	private	private	private	private	State of WA	Private	Private	Wesfarmers CSBP Ltd	State of WA	Tigerpoint Pty Ltd, Goldbright Pty Ltd, Bunbury
Area	(ha)	0.02	0.13	0.07	0.15	8.06	0.21	0.01	0.03	0.05	0.07	0.18	1.47	1.21	2.55	8.83	5.01	0.21	15.84
Locality	)	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Glen Iris	Picton	Picton	Picton	Picton	Picton	Picton East
Lot no. & plan (P)	or diagram (D) of survey (PIN <sup>28</sup> )	120 on D42966 (494120) part	(1347374) part	(1292288) part	(11580410) part	150 on P30054 (1390857)	200 on P2075 (11853580) part	16 on P2075 (494146) part	17 on P2075 (494147) part	18 on P2075 (494148) part	19 on P2075 (494149) part	104 on D84803 (1087271) part	200 on P56668 (11891694) part	(11580413) part	201 on P57769 (11733330) part	91 on P26522 (499878) part	51 on P71842 (11967602) part	(11580415)	9000 on P401654 (12165753) part
LGA																		Bunbury, Dardanup	

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or diagram (D) of		Area	Ownership	Crown reserve	eserve		Land	Park area	Comments/proposal <sup>2</sup>
or diagram (2) or survey (PIN <sup>28</sup> )		(ha)		No.	Vesting <sup>1</sup>	Purpose(s)	type		
			Industrial Properties						
(494451)	Bunbury	4.83	State of WA	12636	City of Bunbury	Recreation	Crown	Mangrove Cove (Anglesea Island)	To be vested in Conservation and Parks Commission
(11866801) part	Bunbury	0.24	State of WA				NCL	Mangrove Cove	Subject to further planning & land use considerations
(494487)	Bunbury	1.53	State of WA				NCL	Mangrove Cove	Northern cleared strip containing pathway to be vested in City of Bunbury, remainder to be vested in Conservation and Parks Commission
502 on P410594 (12263712)	Bunbury	0.69	State of WA	5275	CALM Executive Body (MO)	Conservation, educational purposes, Government requirements - State	Crown	Mangrove Cove	To remain with DBCA
502 on P410594 (12263713)	Bunbury	1.32	State of WA	5275	CALM Executive Body (MO)	Conservation, educational purposes, Government requirements - State	Crown	Mangrove Cove	To remain with DBCA
503 on P410594 (12263714)	Bunbury	1.60	State of WA	5275	CALM Executive Body (MO)	Conservation, educational purposes, Government requirements - State	Crown	Mangrove Cove	To remain with DBCA
501 on P410594 (12263711)	Bunbury	15.01	State of WA	5275	CALM Executive Body (MO)	Conservation, educational purposes, Government requirements - State	Crown	Mangrove Cove	To remain with DBCA
830 on P91060 (12300469)	Vittoria	16.94	State of WA	34030	City of Bunbury	Recreation	Crown	Turkey Point	To remain with City of Bunbury
958 on P219849 (1356722)	Vittoria	10.94	State of WA				NCL	Turkey Point	No change proposed
(1209898)	Vittoria	1.31	State of WA				NCL	Turkey Point	No change proposed
(494427)	Vittoria	0.55	State of WA				UCL	Turkey Point	No change proposed
963 on P220558 (494450) part	Vittoria	4.13	State of WA				UCL	Turkey Point	No change proposed
250 on P66833 (11866293) part	Pelican Point	5.42	State of WA	50518	City of Bunbury (MO)	Recreation	Crown	Pelican Point	To remain with City of Bunbury

# (Appendix ORD: 12.11A)

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12		Bunbury	Bunbury		Dardanup	Dardanup	Dardanup	ation and	ain cleared road, be vested in Commission		ation and	ation and	-iturn closed						
Comments/proposal <sup>2</sup>		To remain with City of Bunbury	To remain with City of Bunbury	No change proposed	To remain with Shire of Dardanup	To remain with Shire of Dardanup	To remain with Shire of Dardanup	To be vested in Conservation and Parks Commission	Shire of Dardanup to retain cleared recreation site & access road, remaining remainder to be vested in Conservation and Parks Commission	N/A	To be vested in Conservation and Parks Commission	To be vested in Conservation and Parks Commission	Shire of Dardanin to retain strip along						
Park area		Pelican Point	Pelican Point	Pelican Point	Eaton foreshore	Pratt Road reserve	Pratt Road reserve	Leicester Reserve	Watson Reserve	Watson Reserve	Eelup/Elbow wetland & south Collie River foreshore	Eelup/Elbow wetland & south Collie River foreshore	Eolun/Ellhour						
Land	type	Crown	road reserve	freehold	Crown	Crown	Crown	NCL	Crown	freehold	Crown	Crown							
	Purpose(s)	Public recreation	Public recreation	Public recreation	Recreation and drainage	Public recreation	Public recreation	Public recreation and drainage	Public road		Recreation, reserve, toilets	Public recreation, park	Public recreation, park		Public recreation, toilets		Foreshore management	Foreshore management	,
eserve	Vesting <sup>1</sup>	City of Bunbury	City of Bunbury	City of Bunbury	City of Bunbury (MO)	City of Bunbury	City of Bunbury	City of Bunbury			Shire of Dardanup (MO)	Shire of Dardanup (MO)	Shire of Dardanup (MO)		Shire of Dardanup (MO)		Shire of Dardanup (MO)	Shire of Dardanup (MO)	
Crown re		45799	45799	45799	50517	47810	47810	45607			24359	25417	25417		25417		43939	43939	
Ownership		State of WA	State of WA	Commissioner of Main Roads	State of WA	State of WA	State of WA	State of WA	State of WA	Australian Boy Scouts' Association	State of WA	State of WA							
Area	(ha)	3.12	1.65	0.80	1.25	0.42	0.005	8.89	0.38	0.55	4.53	3.51	1.60	0.34	7.001	0.87	2.59	3.72	00.00
Locality		Pelican Point	Pelican Point	Pelican Point	Eaton	Australind	Eaton	Eaton	Eaton	Eaton	Australind	Australind	ŗ						
Lot no. & plan (P)	or diagram (D) of survey (PIN <sup>28</sup> )	905 on P22473 (1222428)	906 on P22473 (1222429)	250 on P24033 (1314819)	500 on P67347 (11888883)	132 on P24030 (1314864)	245 on P24030 (1314865)	901 on D93176 (1198061)	(1155907) part	428 on D65386 (496623) part	500 on P65634 (11886551)	501 on P65634 (11886552)	4847 on P6229 (11813668)	(495732)	5536 on P15906 (11036318)	5091 on D29894 (495723)	500 on P405484 (12180397)	501 on P405484 (12180398)	
LGA											Dardanup								

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Park area Comments/proposal <sup>2</sup>		Collie River remainder to be vested in foreshore Conservation and Parks Commission	Eelup/Elbow N/A wetland & south Collie River foreshore	Eelup/Elbow Subject to further planning & land use wetland & south considerations Collie River foreshore	Eelup/Elbow Subject to further planning & land use wetland & south considerations Collie River foreshore	Eelup/Elbow Subject to further planning & land use wetland & south considerations Collie River foreshore	Eelup/Elbow Subject to further planning & land use wetland & south considerations Collie River foreshore	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	
Land Park	type	fores	freehold Eelu wetl Coll fores	freehold Eelu wetl Coll fores	freehold Eelu wetl Coll fores	freehold Eelu wetl Coll fores	freehold Eelu wetl Coll fores	road Mill reserve		road Mill reserve	Crown Mill	Crown Mill	Crown Millars Creek
	Purpose(s) <sup>t</sup> y	protection, public recreation	Ū.	Ę.	Ę.	Ū.	Ę.	Public road rc	Public road rc	Public road rc	Conservation, C foreshore management, public recreation, drain reserve	Drainage, C public recreation	Conservation. C
serve	Vesting <sup>1</sup>										Shire of Dardanup (MO)	Shire of Dardanup (MO)	Shire of
Crown reserve	No.										48979	48829	48802
Ownership			Lancett Court Pty Ltd	Parkridge Group Pty Ltd	Parkridge Group Pty Ltd	Parkridge Group Pty Ltd	Ardross Estates SA Pty Ltd	State of WA	State of WA	State of WA	State of WA	State of WA	State of WA
Area	(ha)		0.21	17.16	16.11	2.21	5.14	0.45	0.11	0.10	6.94	0.21	0.46
Locality			Eaton	Eaton	Eaton	Eaton	Eaton	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge
Lot no. & plan (P)	or diagram (D) of survey (PIN <sup>28</sup> )		9504 on P50198 (11561849) part	9503 on P50198 (11561847)	9505 on P50198 (11561850)	9004 on P40217 (12190812) part	3001 on P38067 (11197151) part	(1370905) part	(12180399) part	(1218778) part	647 on P51067 (11593725)	645 on P51067 (11593724)	646 on P50141
LGA													

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Park area Comments/proposal <sup>2</sup>			Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup		Millars Creek To remain with Shire of Dardanup	Millars Creek To remain with Shire of Dardanup		Millars Creek To remain with Shire of Dardanup				Millars Creek To remain with Shire of Dardanup				
Land	() () ()	iype	Crown	Crown	Crown	road reserve	road reserve	road reserve	road reserve	Crown		Crown	Crown		Crown				Crown				
	D. 1210 0 00 (0)	rurpose(s)	Drainage and recreation	Conservation, foreshore management, recreation,	Conservation, foreshore management, recreation, drainage	Public road	Public road	Public road	Public road	Public	recreation, drainage	Public recreation	Conservation, foreshore	management, recreation, drainage	Conservation,	foreshore	management, recreation	drainage	Conservation,	toreshore	management,	recreation, drainage	200000000
eserve	1/04/1001	vesting	Shire of Dardanup (MO)	Shire of Dardanup	Shire of Dardanup					Shire of	Darganup (MU)	Shire of Dardanup (MO)	Shire of Dardanin		Shire of	Dardanup			Shire of	Dardanup			
Crown re		.0N	48801	47537	47537					52264		52942	47537		47537				47537				
Ownership			State of WA	State of WA	State of WA	State of WA	State of WA	State of WA	State of WA	State of WA		State of WA	State of WA		State of WA				State of WA				
Area	(04)	(EU)	2.74	0.6	1.61	0.01	0.03	0.03	0.005	0.02		1.61	0.29		0.73				2.44				
Locality	6		Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge		Millbridge	Millbridge		Millbridge				Millbridge				
Lot no. & plan (P)		or diagram (⊔) or survey (PIN² <sup>8</sup> )	641 on P50141 (11559826)	122 on P42477 (11365904)	121 on P41302 (11323542)	(12276466) part	(12276464) part	(12188724) part	(12249432) part	2010 on P404752	Tid (8C/88121)	2009 on P407123 (12223412) part	2008 on P55740		2023 on P55740	(11718316)			15 on P38067	(11197045)			

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Comments/proposal <sup>2</sup>			To remain with Shire of Dardanup	To be vested in Shire of Dardanup	To be vested in Shire of Dardanup	To be vested in Shire of Dardanup	To be vested with Shire of Dardanup following implementation of developer commitments						
Park area			Millars Creek	Millars Creek	Millars Creek	Millars Creek	Millars Creek	Clifton Community					
Land	type		Crown	Crown	Crown	Crown	Crown	Crown	UCL	NCL	ncr	freehold	Crown
	Purpose(s)	recreation, drainage	Conservation, foreshore management, recreation, drainage	Conservation, foreshore management, recreation, drainage	Conservation, foreshore management, recreation, drainage	Conservation, foreshore management, recreation, drainage	Conservation, foreshore management, recreation, drainage	Conservation, foreshore management, recreation, drainage					Recreation
Crown reserve	Vesting <sup>1</sup>		Shire of Dardanup					Shire of Harvey					
Crown	No.		47537	47537	47537	47537	47537	47537					43714
Ownership			State of WA	State of WA	State of WA	State of WA	Ardross Estates SA Pty Ltd	State of WA					
Area	(ha)		0.74	0.61	0.24	0.24	1.06	1.06	3.22	0.45	3.95	1.83	15.67
Locality			Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Millbridge	Australind
Lot no. & plan (P)	or diagram (D) of survey (PIN <sup>28</sup> )		444 on P47151 (11533567)	2001 on P66488 (11941677)	2002 on P66488 (11941676)	2003 on P55740 (11718310)	2005 on P55740 (11718312)	2006 on P55740 (11718313)	2012 on P410933 (12276465)	2011 on P404752 (12188759) part	2061 on P407123 (12223415)	9535 on P408140 (12281688) part	500 on P66272
LGA													Harvey

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					(			-	-	2
LGA	Lot no. & plan (P)	Locality	Area	Ownership	Crown reserve	eserve		Land	Park area	Comments/proposal <sup>2</sup>
	or diagram (U) of survey (PIN <sup>28</sup> )		(ha)		NO.	Vesting <sup>1</sup>	Purpose(s)	type		
										be vested in Conservation and Parks Commission
	5117 on P9821 (501675)	Australind	1.83	State of WA	31576	Shire of Harvey	Public recreation	Crown	Clifton Community Reserve & foreshore	To remain with Shire of Harvey
	501 on P66272 (11905546)	Australind	15.88	State of WA	31576	Shire of Harvey	Public recreation	Crown	Clifton Community Reserve & foreshore	To remain with Shire of Harvey, northern portion subject to further land use considerations
	502 on P66272 (11905547)	Australind	0.11	Water Corporation				freehold	Clifton Community Reserve & foreshore	To remain with Water Corporation
	23 (501672)	Australind	5.25	WAPC				freehold	Clifton Community Reserve & foreshore (Alexander Island)	To be vested in Conservation and Parks Commission
	300 on D13648	Australind	2.01	State of WA	33247	unmanaged	Public	Crown	Collie River	Subject to further consideration
	(502785)					reserve	recreation		foreshore reserves - golf course to Elbow	associated with northern portion of adjacent Lot 501
	5188 on D26619 (502784)	Australind	4	State of WA	33247	unmanaged reserve	Public recreation	Crown	Collie River foreshore reserves -	Future tenure is subject to consideration under the South West Motive Triel Southmost
	£100 DJ6610	Atalling		Ctate of W/A			DL1:		Collic Directo ElDOW	
	(502786) (502786)	Austraund	7.24	State OI WA	33241	unmanaged reserve	recreation	Сгомп	Could Kiver foreshore reserves - golf course to Elbow (Sandro Felored)	ruture tenure 1s supject to consideration under the South West Native Title Settlement
	355 on P72934	Anstralind	73 94	State of WA					Australind reserves	On completion of site contamination
	(11966228) part	numphenty	+					20	source numbers	Concernation of site concernation remediation, to be vested in Conservation and Parks Commission
	350 on P72934 (11966227) part	Australind	8.03	State of WA				Crown Lease	Australind reserves	N/A
	122 on P64347 (12303511) part	Australind	0.22	Water Corporation				freehold	Australind reserves	To be amalgamated with Lot 121 on P64347 (12303512)
	121 on P64347 (12303512)	Australind	24.62	WAPC				freehold	Australind reserves	On completion of site contamination remediation, to be vested in Conservation and Parks Commission
	5428 on D26619 (502762)	Australind	5.26	State of WA	38393	WA Wildlife Authority <sup>3</sup>	Conservation, fauna, protection of flora	Crown	Australind reserves	To remain with Conservation and Parks Commission
	123 on P64347 (12303513)	Australind	0.64	Shire of Harvey				freehold	Australind reserves	To be vested in Conservation and Parks Commission
	123 on P64347 (12303510)	Australind	3.58	Shire of Harvey				freehold	The Elbow	Shire of Harvey to retain southern portion (including recreation site infrastructure), northern portion to be vested in Conservation and Parks Commission

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Comments/proposal <sup>2</sup>		To be vested in Conservation and Parks Commission	To be vested in Conservation and Parks Commission	To be vested in Conservation and Parks Commission	Subject to further planning & land use considerations as part of Foreshore Management Plan	Subject to further planning & land use considerations as part of Foreshore Management Plan	To remain with Shire of Harvey							
Park area		The Junction/Twin Rivers	The Junction/Twin Rivers	The Junction/Twin Rivers	South Treendale Collie River foreshore reserves	South Treendale Collie River foreshore reserves	Foreshore reserves west of Brunswick River south of Paris Rd							
Land	type	freehold	freehold	UCL	freehold	freehold	Crown	Crown	freehold	freehold	Crown	Crown	Crown	Crown
	Purpose(s)						Public recreation, drainage	Public recreation, drainage			Public recreation	Public recreation	Recreation	Recreation
eserve	Vesting <sup>1</sup>						Shire of Harvey (MO)	Shire of Harvey (MO)			Shire of Harvey	Shire of Harvey	Shire of Harvey	Shire of Harvey
Crown reserve	No.						32214	32214			43953	32213	8025	8025
Ownership		Shire of Harvey	WAPC	State of WA	Fastbet Investments Pty Ltd	Fastbet Investments Pty Ltd	State of WA	State of WA	Shire of Harvey	Shire of Harvey	State of WA	State of WA	State of WA	State of WA
Area	(ha)	3.05	23.61	0.47	12.41	10.27	0.83	1.39	2.34	18.67	0.64	0.86	1.15	0.08
Locality		Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind
Lot no. & plan (P)	or diagram (D) of survey (PIN <sup>28</sup> )	3 on P2858 (496505)	929 on P57707 (11740698)	(496504)	9504 on P414431 (12354369) part	9501 on P409841 (12267810) part	5146 on P9944 (502070)	100 on P458054 (11487238)	19 on D68327 (502065)	14 on D28693 (502076)	5742 on D88577 (1137577)	5147 on P9944 (502084)	6129 on P107134 (502083)	4977 on P171122 (502082)
LGA														

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LGA	Lot no. & plan (P)	Locality	Area	Ownership	Crown reserve	eserve		Land	Park area	Comments/proposal <sup>2</sup>
	or diagram (D) of survey (PIN <sup>28</sup> )	)	(ha)		No.	Vesting <sup>1</sup>	Purpose(s)	type		-
	16 on P9944 (502080) part	Australind	5.09	private				freehold	Foreshore reserves west of Brunswick River south of Paris Road	N/A
	10 on D20247 (502081) part	Australind	0.88	private				freehold	Foreshore reserves west of Brunswick River south of Paris Road	N/A
	5513 on P13594 (503652)	Australind	76.0	State of WA	39922	Shire of Harvey (MO)	Public recreation	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To remain with Shire of Harvey
	5512 on P13595 (503653)	Australind	3.72	State of WA	40020	Shire of Harvey	Public recreation	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	Portion south of Lot 1 on D65161 (503650) to remain with Shire of Harvey, remainder to be vested in Conservation and Parks Commission
	5509 on D65161 (503651)	Australind	1.78	State of WA	39864	Shire of Harvey	Public recreation	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To remain with Shire of Harvey
	1 on D 65161 (503650)	Australind	5.67	Shire of Harvey				freehold	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	<i>5737</i> on P18677 (1114536)	Leschenault	1.38	State of WA	43651	Shire of Harvey	Public recreation	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	5842 on D93610 (1205858)	Leschenault	0.2	State of WA	43651	Shire of Harvey	Public recreation	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	5736 on P18677 (1114539)	Leschenault	7.003	State of WA	43651	Shire of Harvey	Public recreation	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	5736 on P20002 (11624867)	Leschenault	4.05	State of WA	43651	Shire of Harvey	Public recreation	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	5456 on P216236 (503660)	Australind	1.62	State of WA				UCL	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission

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IGA	Lot no. & plan (P)	Locality	Area	Ownership	Crown r	eserve		land	Park area	Comments/proposal <sup>2</sup>
	or diagram (D) of survev (PIN <sup>28</sup> )	)	(ha)	-	No.	Vesting <sup>1</sup>	Purpose(s)	type		-
	6055 on P23788 (1314810)	Australind	5.85	State of WA	46225	unmanaged reserve	Recreation, conservation and foreshore management	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	335 on P41808 (11315859) part	Australind	3.11	State of WA	46225	unmanaged reserve	Recreation, conservation and foreshore management	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	Landscaped/mown areas to be vested in Shire of Harvey, remainder to be vested in Conservation and Parks Commission
	338 on P43298 (11394283)	Australind	0.29	State of WA	46225	unmanaged reserve	Recreation, conservation and foreshore management	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	Landscaped/mown areas to be vested in Shire of Harvey, remainder to be vested in Conservation and Parks Commission
	801 on P43301 (11456640) part	Australind	0.11	State of WA	46225	unmanaged reserve	Recreation, conservation and foreshore management	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	Portion in Regional Park to be vested in Conservation and Parks Commission, remainder of Lot to be vested in Shire of Harvey
	802 on P46330 (11518832) part	Australind	0.31	State of WA	46225	unmanaged reserve	Recreation, conservation and foreshore management	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	Landscaped/mown areas to be vested in Shire of Harvey, remainder to be vested in Conservation and Parks Commission
	803 on P48873 (11570377) part	Australind	0.05	State of WA	46225	unmanaged reserve	Recreation, conservation and foreshore management	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	<i>5</i> 734 on P18677 (1114537)	Australind	4.46	State of WA	45505	Water and Rivers Commission	Foreshore management	Crown	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	To be vested in Conservation and Parks Commission
	1 (503654)	Australind	0.02	private				freehold	Foreshore reserves west of Brunswick River - Paris Road to Forrest Hwy	N/A
	4781 on P167274 (496567)	Australind	3.12	State of WA	26270	Shire of Harvey	Conservation of flora	Crown	Wardandi Flora Reserve & adjacent reserves	To remain with Shire of Harvey
	4781 on P167274 (496568)	Australind	6.23	State of WA	26270	Shire of Harvey	Conservation of flora	Crown	Wardandi Flora Reserve & adjacent reserves	To remain with Shire of Harvey
	5866 on P193908 (1262126)	Australind	4.91	State of WA	26271	Shire of Harvey	Rubbish dump	Crown	Wardandi Flora Reserve & adjacent reserves	To remain with Shire of Harvey
	562 on P68322 (11899777)	Australind	0.03	State of WA				Public Road	Wardandi Flora Reserve & adjacent reserves	To remain with Shire of Harvey

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Comments/proposal <sup>2</sup>		To remain with Shire of Harvey	Future tenure is subject to consideration under the South West Native Title Settlement	Landscaped/mown area to remain with Shire of Harvey, remainder to be vested in Conservation and Parks Commission	To remain with Shire of Harvey	Following implementation of developer commitments, to be vested in Conservation and Parks Commission	Following implementation of developer commitments, landscaped/POS areas to be vested in Shire of Harvey, remainder to be vested in Conservation and Parks Commission	To be vested in Conservation and Parks Commission	To be vested in Conservation and Parks Commission			
Park area		Wardandi Flora Reserve & adjacent reserves	Wardandi Flora Reserve & adjacent reserves	Foreshore reserves east of Brunswick River - Paris Road to Forrest Hwy	Foreshore reserves east of Brunswick River - Paris Road to Forrest Hwy	Foreshore reserves east of Brunswick River - Paris Road to Forrest Hwy	Foreshore reserves east of Brunswick River - Paris Road to Forrest Hwy	Foreshore reserves east of Brunswick River - Paris Road to Forrest Hwy	Foreshore reserves east of Brunswick River - Paris Road to Forrest Hwy	Foreshore reserves east of Brunswick River south of Paris Rd	Foreshore reserves east of Brunswick River south of Paris Rd	Foreshore reserves east of Brunswick River south of Paris Rd
Land	type	Public Road	Crown	freehold	Crown	Crown	Crown	Crown	Crown	Crown	freehold	freehold
	Purpose(s)		Regional open space		Public recreation	Public recreation	Public recreation	Public recreation	Foreshore management	Foreshore management, conservation, public recreation		
eserve	Vesting <sup>1</sup>		unmanaged reserve		Shire of Harvey	Shire of Harvey	Shire of Harvey	Shire of Harvey	Water and Rivers Commission	unmanaged reserve		
Crown r	No.		35061		46276	46276	46276	46276	46275	52873		
Ownership		State of WA	State of WA	Shire of Harvey	State of WA	State of WA	WAPC	WAPC				
Area	(ha)	0.79	12.69	11.89	0.44	3.92	60.6	0.78	23.18	16.33	1.43	3.52
Locality	)	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind	Australind
Lot no. & plan (P)	or diagram (D) of survey (PIN <sup>28</sup> )	(11737646) part	560 on P68322 (11899778)	42 on D60534 (503655) part	5976 on P220515 (1299574)	5977 on P220515 (1299575)	5978 on P220515 (1299576)	21 on P35611 (11118467)	5774 on P220515 (1299573)	110 on P408141 (12262164)	112 on P408141 (12262177)	111 on P408141 (12262172)
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or oragram (U) or survey (PIN <sup>28</sup> ) Aus (496591) (12010942) part Aus (12010942) part Aus (12000224) part Aus (12000224) part Aus (11682229) Aus (11682229)	Australind Australind	(na)				~		5	
				NO.	Vesting <sup>1</sup>	Purpose(s)	type		
		0.77	State of WA	8118	Shire of Harvey	Stopping place	Crown	Foreshore reserves east of Brunswick River south of Paris Rd	To remain with Shire of Harvey
		0.03	State of WA				Public Road	Foreshore reserves east of Brunswick River south of Paris Rd	To remain with Shire of Harvey
Aus	Australind	2.41	State of WA	51740	unmanaged reserve	Recreation	Crown	Foreshore reserves east of Brunswick River south of Paris Rd	Landscaped/mown areas to be vested in Shire of Harvey, remainder to be vested in Conservation and Parks Commission
	Australind	7.71	WAPC				freehold	Foreshore reserves east of Brunswick River south of Paris Rd	Area containing infrastructure associated with house to remain with WAPC, remainder to be vested in Conservation and Parks Commission
(1226953) Bru	Brunswick	11.95	State of WA	45532	unmanaged reserve	Public recreation	Crown	Brunswick River foreshore reserves - east of Forrest Hwy	To be vested in Conservation and Parks Commission
5905 on P215641 Brui (1339531)	Brunswick	0.02	State of WA				NCL	Brunswick River foreshore reserves - east of Forrest Hwy	To be vested in Conservation and Parks Commission
61 on P22225 Brui (1226947) part	Brunswick	9.51	WAPC				freehold	Brunswick River foreshore reserves - east of Forrest Hwy	To be vested in Conservation and Parks Commission
100 on D9442 Brui (11567912) part	Brunswick	2.66	Walford Developments Pty Ltd				freehold	Brunswick River foreshore reserves - east of Forrest Hwy	N/A
5729 on P17161 Brui (1014271) part	Brunswick	4.65	State of WA	43511	Shire of Harvey	Public recreation	Crown	Brunswick River foreshore reserves - east of Forrest Hwy	To be vested in Conservation and Parks Commission
(11662116) Wel	Wellesley	0.16	State of WA	43511	Shire of Harvey	Public recreation	Crown	Brunswick River foreshore reserves - east of Forrest Hwy	To be vested in Conservation and Parks Commission
43 on P17161 Wel (1059634) part	Wellesley	10.51	Oasis Holdings Pty Ltd				freehold	Brunswick River foreshore reserves - east of Forrest Hwy	N/A
500 on D74316 Wel (542406) part	Wellesley	1.67	Oasis Holdings Pty Ltd				freehold	Brunswick River foreshore reserves - east of Forrest Hwy	N/A
Aus	Australind	0.05	State of WA				NCL	Point Douro	To be vested in Conservation and Parks Commission
(11575854) part Aus	Australind	0.001	State of WA				UCL	Point Douro	To be vested in Conservation and Parks Commission

( -	( 	=							-	<u>-</u>
FGA	Lot no. & plan (P)	Locality	Area	Uwnersnip	wn r	eserve		Land	Park area	Comments/proposal <sup>2</sup>
	or diagram (U) of survey (PIN <sup>28</sup> )		(na)		NO.	Vesting	Purpose(s)	type		
	10 on P220125 (1286915) part	Australind	2.77	State of WA	26858	Water and Rivers Commission (MO)	Foreshore management	Crown	Point Douro	To be vested in Conservation and Parks Commission
	9 on P220125 (1286914) part	Australind	0.61	State of WA	26858	Water and Rivers Commission (MO)	Foreshore management	Crown	Point Douro	To be vested in Conservation and Parks Commission
	8 on P220125 (1286913) part	Australind	1.81	State of WA	26858	Water and Rivers Commission (MO)	Foreshore management	Crown	Point Douro	To be vested in Conservation and Parks Commission
	6 on P220125 (1286912)	Australind	0.57	State of WA	26858	Water and Rivers Commission (MO)	Foreshore management	Crown	Point Douro	To be vested in Conservation and Parks Commission
	7 on P220125 (1211195)	Australind	0.15	State of WA	26858	Water and Rivers Commission (MO)	Foreshore management	Crown	Point Douro	To be vested in Conservation and Parks Commission
	2 on P193812 (502824)	Australind	4.92	State of WA	13531	Water and Rivers Commission (MO)	Foreshore management	Crown	Point Douro (Bar Island)	To be vested in Conservation and Parks Commission
	30 on P51958 (11592087) part	Australind	5.89	Dewsbury Pty Ltd				freehold	Point Douro	N/A
	4851 on P557 (503211)	Australind	4.22	State of WA	25441	Shire of Harvey (MO)	Recreation	Crown	Ridley Place Foreshore Park	To remain with Shire of Harvey
	5 on D24236 (503212)	Australind	0.20	Shire of Harvey				freehold	Ridley Place Foreshore Park	To remain with Shire of Harvey
	4921 on P2681 (503240)	Australind	1.41	State of WA	9722	Shire of Harvey	Recreation	Crown	Ridley Place Foreshore Park	To remain with Shire of Harvey
	4779 on P404503 (12155898) part	Australind	4.09	State of WA	25203	Shire of Harvey (MO)	Recreation	Crown	Leschenault Estuary eco- museum/Leschenaul t Estuary Old Coast Road foreshore	To remain with Shire of Harvey
	4921 on P2681 (1211194)	Australind	0.31	State of WA	9722	Shire of Harvey	Recreation	Crown	Leschenault Estuary Cathedral Ave foreshore	To remain with Shire of Harvey
	5286 on P2686 (503241)	Australind	0.41	State of WA	36030	Shire of Harvey	Heritage place	Crown	Leschenault Estuary Cathedral Ave foreshore	To remain with Shire of Harvey

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Comments/proposal <sup>2</sup>		To remain with Shire of Harvey	To remain with Shire of Harvey	To be vested in Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To remain with Shire of Harvey	To be vested with Shire of Harvey
Park area		Leschenault Estuary Cathedral Ave foreshore	Leschenault Estuary Old Coast Road foreshore												
Land	type	road reserve	Crown	Crown	Crown	Crown	road reserve	Crown	freehold	Crown	Crown	Crown	Crown	road reserve	freehold
	Purpose(s)	Public road	Public recreation	Conservation and recreation	Foreshore management	Public recreation	Public road	Recreation		Recreation	Recreation	Public recreation	Public recreation	Public road	
eserve	Vesting <sup>1</sup>		Shire of Harvey	Water and Rivers Commission	Shire of Harvey	Shire of Harvey		Shire of Harvey		Shire of Harvey	Shire of Harvey	Shire of Harvey	Shire of Harvey		
Crown reserve	No.		36857	45943	44269	43513		18133		26534	26872	29508	29508		
Ownership		State of WA	Shire of Harvey	State of WA	WAPC										
Area	(ha)	1.80	6.22	2.98	9.19	1.47	13.21	0.25	1.99	0.92	0.53	0.16	0.14	0.06	0.16
Locality		Leschenault	Leschenault	Leschenault	Leschenault	Leschenault	Leschenault	Australind							
Lot no. & plan (P)	or diagram (D) of survey (PIN <sup>28</sup> )	(1343937) part	6034 on P220933 (1317775)	5865 on D86526 (541493)	5741 on D88168 (1135553)	5728 on P12735 (541514)	(1348501) part	3919 (496340)	31 on D27242 (496341)	15 on P194817 (1317096)	4939 on D27767 (502154)	5735 on D24172 (502153)	5049 on D34684 (502155)	(11397024) part	61 on P41826 (11347901)
LGA															

# (Appendix ORD: 12.11A)

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IGA	Lot no & nlan (P)	Locality	Агеа	Ownershin	Crown re	resenve		puel	Park area	Comments/nronosal2
	or diagram (D) of survey (PIN <sup>28</sup> )		(ha)		No.	Vesting <sup>1</sup>	Purpose(s)	type		
	4723 on D20089 (502163)	Australind	0.83	State of WA	24445	unmanaged reserve	Recreation	Crown	Leschenault Estuary Old Coast Road foreshore	To be vested with Shire of Harvey
	5046 on D35230 (502168)	Australind	0.03	State of WA	24445	unmanaged reserve	Recreation	Crown	Leschenault Estuary Old Coast Road foreshore	To be vested with Shire of Harvey
	5250 on D49249 (501929)	Australind	0.1	State of WA	35051	unmanaged reserve	Public recreation	Crown	Leschenault Estuary Old Coast Road foreshore	To be vested with Shire of Harvey
	4744 on D21347 (501930)	Australind	0.47	State of WA	24879	unmanaged reserve	Recreation	Crown	Leschenault Estuary Old Coast Road foreshore	To be vested with Shire of Harvey
	46 on D61635 (502165)	Australind	0.13	WAPC				freehold	Leschenault Estuary Old Coast Road foreshore	To be vested with Shire of Harvey
	14 on P232713 (540173) part	Parkfield	156.23	private				freehold	Leschenault Peninsula C.P. & proposed additions	To be vested in Conservation and Parks Commission
	7 on P232713 (540172) part	Parkfield	87.97	Coonawarra Nominees Pty Ltd				freehold	Leschenault Peninsula C.P. & proposed additions	N/A
	(1307696) part	Parkfield	66.6	State of WA			Public road	road reserve	Leschenault Peninsula C.P. & proposed additions	To remain with Shire of Harvey
	6121 (11340442) part	Parkfield	1.50	State of WA			Public road	road reserve	Leschenault Peninsula C.P. & proposed additions	To remain with Shire of Harvey
	(1307699)	Parkfield	1.36	State of WA			Public road	road reserve	Leschenault Peninsula C.P. & proposed additions	To remain with Shire of Harvey
	(1307700) part	Parkfield	0.47	State of WA			Public road	road reserve	Leschenault Peninsula C.P. & proposed additions	To be vested in Conservation and Parks Commission
	100 on P44680 (11426637)	Parkfield	38.47	WAPC				freehold	Leschenault Peninsula C.P. & proposed additions	To be vested in Conservation and Parks Commission
	(11624952)	Leschenault	13.31	State of WA			Public road	road reserve	Leschenault Peninsula C.P. & proposed additions	Remain managed by DBCA as part of the Conservation Park
	5641 on P190960 (540089)	Leschenault	564.28	State of WA	42470	NPNCA <sup>3</sup>	Conservation park	Crown	Leschenault Peninsula C.P. & proposed additions	To remain with Conservation and Parks Commission, managed by DBCA

Greater Bunbury Regional Park draft management plan

or diagram (D) of survey (PIN43)(ha)(ha)No.Vesting'Purpose(s)5547 on P188523Leschenault5.67State of WA40564NPNCAConservation(540167)Leschenault5.67State of WA40564NPNCAConservation(540167)Leschenault179.99State of WA405Purpose(s)3 on P3957 (540087)Leschenault179.99State of WAPurpose3 on P3957 (540080)Leschenault127.87State of WAPurpose(s)4 on P3957 (540080)Leschenault127.87State of WAPurpose(s)4 on P3957 (540090)Leschenault82.31State of WAPurpose(s)5592 on P91879Leschenault72.24State of WA42470NPNCA(49449)Urpose187State of WA42470NPNCAConservation(17 on P406672Roelands5.87State of WA9179Purposed341 on P5970Roelands3.31State of WA50179umanagedRecreation at reserve(11771208)Roelands3.31State of WA50179umanagedRecreation at reserve	type n of Crown na freehold freehold	
3Leschenault5.67State of WA40564NPNCA087)Leschenault179.99State of WA091)Leschenault96.09State of WA </th <th>Crown freehold freehold</th> <th></th>	Crown freehold freehold	
087)Leschenault179.99State of WA091)Leschenault96.09State of WA086)Leschenault127.87State of WA080)Leschenault127.87State of WA090)Leschenault82.31State of WA091)Leschenault72.24State of WA42470NPNCANPNCAA42470NPNCARoelands5.87State of WARoelands5.87State of WARoelands3.31State of WARoelands3.31State of WA		Leschenault         To remain with Conservation and           Peninsula C.P. &         Parks Commission, managed by           proposed additions         DBCA
091)Leschenault96.09State of WA086)Leschenault127.87State of WA090)Leschenault82.31State of WA091)Leschenault82.31State of WA092Leschenault72.24State of WA1Roelands5.87State of WA424701Roelands5.87State of WA1Roelands5.87State of WA1Roelands5.31State of WA1Roelands5.31State of WA1Roelands5.31State of WA1Roelands5.31State of WA1Roelands5.31State of WA1Roelands5.31State of WA1Roelands3.31State of WA1RoelandsState of WA1RoelandsState of WA<		Leschenault         To be vested in Conservation and           Peninsula C.P. &         Parks Commission           proposed additions
086)     Leschenault     127.87     State of WA     127.87       090)     Leschenault     82.31     State of WA     127.87       1     Leschenault     72.24     State of WA     12470       1     Roelands     5.87     State of WA     12470	pr	Leschenault         To be vested in Conservation and           Peninsula C.P. &         Parks Commission           proposed additions         Parks Commission
090)     Leschenault     82.31     State of WA        Leschenault     72.24     State of WA     42470     NPNCA       Roelands     5.87     State of WA     50179     unmanaged       Roelands     3.31     State of WA     50179     unmanaged	freehold Lo Pe	Leschenault         To be vested in Conservation and           Peninsula C.P. &         Parks Commission           proposed additions         Parks Commission
Leschenault72.24State of WA42470NPNCARoelands5.87State of WAParaceleanParaceleanRoelands3.31State of WASol79unmanagedRoelands3.31State of WASol79unmanaged	freehold Lo Pe	Leschenault         To be vested in Conservation and           Peninsula C.P. &         Parks Commission           proposed additions
t Roelands 5.87 State of WA State of WA Roelands 3.31 State of WA 50179 unmanaged reserve	servation Crown	Leschenault         To be vested in Conservation and           Peninsula C.P. &         Parks Commission           proposed additions         Parks Commission
Roelands         3.31         State of WA         50179         unmanaged           reserve         reserve	MUTON	Meadow Landing Fire access track to be vested in Shire of Harvey, remainder to be vested in Conservation and Parks Commission
	Recreation and Crown foreshore management	Meadow Landing Foreshore strip to be vested in Conservation and Parks Commission, remainder to be vested in Shire of Harvey
6213 on P36378     Roelands     13.79     State of WA     47717     ummanaged     Foreshore       (11156178)     13.79     State of WA     47717     ummanaged     managed	Crown ent	Meadow Landing Future tenure is subject to consideration under the South West Native Title Settlement
6211 on P35690     Roelands     13.60     State of WA     47717     unmanaged     Foreshore       (11141235)     (11141235)     reserve     managed     management	Foreshore Crown management	Meadow Landing Future tenure is subject to consideration under the South West Native Title Settlement

<sup>2</sup> Proposals in this table may need more consultation with the owner(s) or vesting body to complete, may be subject to future planning proposals/approvals, and some proposals may not reach a <sup>1</sup> MO = management order; unmanaged reserve = a reserve which is not formally placed under the care and control of a management body (formerly unvested reserve).

conclusion during the life of the plan or may result in a different outcome than proposed. <sup>3</sup> The NPNCA (National Parks and Nature Conservation Authority) and the Western Australian Wildlife Authority have been replaced by the Conservation and Parks Commission.

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**Greater Bunbury Regional Park draft management plan** 

# Appendix 3. Management zones and recreation settings

Management zones and recreation settings framework

Man	Conservation and Protection Natural En	ecreation settings	· · · · · · · · · · · · · · · · · · ·	Recreation		
Management zones	Natural Environment Use Recreation				Highly Modified	
	l				ied	

# Management zones

_	Management emphasis	Acceptable uses and facilities	Recreation setting
Conservation and The protection as as protection by the protection the protection by	The management emphasis is to protect and where possible enhance the conservation values (biota, natural systems and heritage) as well as the landscape qualities of the park. Priority will be given to restoring and maintaining the natural state of conservation and protection areas. Visible evidence of management will be low/minimal.	Areas within this zone will have restricted public access to protect conservation values. Unauthorised vehicles prohibited. Rehabilitation of vegetation and habitat protection will be undertaken. Education, interpretation and research uses are appropriate. Some facilities, such as interpretive information, nature trails, boardwalks, cycle paths and through access, is acceptable in certain locations, with measures to mitigate environmental impacts (Section 18 <i>Visitor use and planning</i> ). The provision of new facilities will depend on the values of an area and whether it is located within the Bunbury Water Reserve and Wellhead Protection Zones.	'Natural' or 'Natural- recreation'
Natural environment Th use an an lar ev: ev	The management emphasis is to provide for appropriate uses of the natural environment. Areas will be managed jointly for conservation and enhancement of native plants and animals, improvement of landscape qualities, public use and recreation. Public use must be compatible with the assigned purpose of the relevant reserve. Visible evidence of management may be moderate to high. Management will encourage uses and develop facilities that promote conservation and education.	Public access primarily by nature trails and cycle paths. Through access by vehicles along established roads is allowed. Some development of facilities may be necessary. These may include education nodes and facilities associated with visitor use. The provision of facilities will depend on the values of an area and whether it is located within the Bunbury Water Reserve and Wellhead Protection Zones. Commercial concessions may be appropriate. Rehabilitation and habitat protection may be necessary.	'Natural-recreation' or 'Recreation'
Recreation Th rec de rec mi pls the evv	The prime emphasis of management will be to provide a variety of recreation opportunities. The type and scale of facilities provided will depend on the values of any given area, community demand for recreation, and appropriate park management. Management involves minimising the impact of visitor activities through the sensitive placement and provision of access and facilities as well as through the provision of information and interpretive material. Visible evidence of management may be high.	Public use may be high in these areas. Ranges from passive to active recreation pursuits. Commercial concessions are considered appropriate. Rehabilitation, landscaping and reticulation of areas may be necessary. The provision of new facilities will depend on the values of an area and whether it is located within the Bunbury Water Reserve and Wellhead Protection Zones.	'Natural-recreation', 'Recreation' or 'Highly modified'
Special use Na	Management for purposes other than conservation, recreation or visitor services.	Private lease or freehold land. No public access. Access for managing agencies as needed.	No visitor management settings

# (Appendix ORD: 12.11A)

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# Recreation settings

	Highly modified	Recreation	Natural-recreation	Natural
Principle experience	Visitors within a 'Highly Modified' setting will experience: an extensive range of nature based recreation opportunities; opportunities to discover a specific feature or experience; a high level of on-site information and facilities requiring a minimal level of self-reliance; opportunities for group activities; and a high likelihood of contact with other users.	Visitors within a 'Recreation' setting will experience: a range of opportunities to interact with nature; a high to moderate level of on-site information and facilities requiring a low level of self-reliance; and a high to moderate likelihood of contact with other users.	Visitors within a 'Natural Recreation' setting will experience: a range of opportunities for activities including opportunities for challenging interaction with nature using outdoor skills; a moderate to low level of on-site information requiring a degree of pre-visit planning using off-site information; a moderate to low level of facilities requiring visitors to be largely self- reliant; and a moderate to low likelihood of contact with individuals and small groups allowing for experiences of tranquility, solitude and independence.	Visitors within a 'Natural' setting will experience: a range of opportunities for activities in an environment that offers a high degree of challenge; a low level of on-site information requiring visitors to planning using off-sitifies requiring visitors to be self-reliant; and a low likelihood of interaction between visitor groups allowing for experiences of tranquility, solitude and independence.
Visitation and interaction	High level of visitation from the local population and visitors to the area.	High to moderate level of visitation.	Moderate to low level of visitation.	Low level of visitation.
	High likelihood of contact with other users, interaction with other visitors is expected and is	High to moderate likelihood of contact with other users.	Moderate to low likelihood of contact with individuals and small groups.	Low likelihood of interaction between visitor groups.
	constant.		Visitors can experience isolation from human influences.	Visitors can experience solitude.
	Group and family activities are an important part of the visitor experience.			
Self-reliance	Minimal self-reliance is required.	Low level of self-reliance is required.	Visitors need to be largely self-reliant, access	Visitors need to be self-reliant.
		Outdoor skills important in areas away from roads and tracks.	Outdoor skills are important.	Outdoor skills are required.
Information and interpretation	Interpretation shelters, displays and leaflets, guided tours may be provided.	Interpretative material, brochures and track guides available.	Signposting provided where necessary and minimal interpretative material may be provided	Limited sign posting only where necessary. Low level of information
	Trailheads and signs along trails.	Trailheads and signs along trails.	off-site of at trailbeads.	round principally off-site.
	Large group interpretation and education focus.		Trip planning before visit more essential. Pre-visit off-site information available.	Trip planning before visit is essential. Pre- visit off-site information available.
Modification and development	High level of modification to natural landscape character is evident.	High to moderate level of modification to natural landscape character is	Moderate to low level of modification to natural landscape character is evident. Local landscape	Minimal modification to natural landscape character is evident. Local
	A high level of facilities is provided including defined parking areas, shade shelters, gas barbecues,	A high to moderate level of facilities	and readines are commany autoring under laye been some changes to the vegetation and landform such as clearings and formed tracks.	major changes to the landform or features.
	tables, tollets and visitor information; a visitor centre may also be present.	such as interpretative shelters, gas barbecues, tables and toilets maybe provided. Facilities may be common	A moderate to low level of basic facilities such as shade shelters, barbecues and toilets may be	A low level of basic facilities such as parking areas, signage and trails may be provided. Parking areas provided are
	High to moderate level of marine facilities available at marine entry points, including large boat ramps. High level of recreation and commercial craft.	but clustered.	provided.	elements.

# (Appendix ORD: 12.11A)

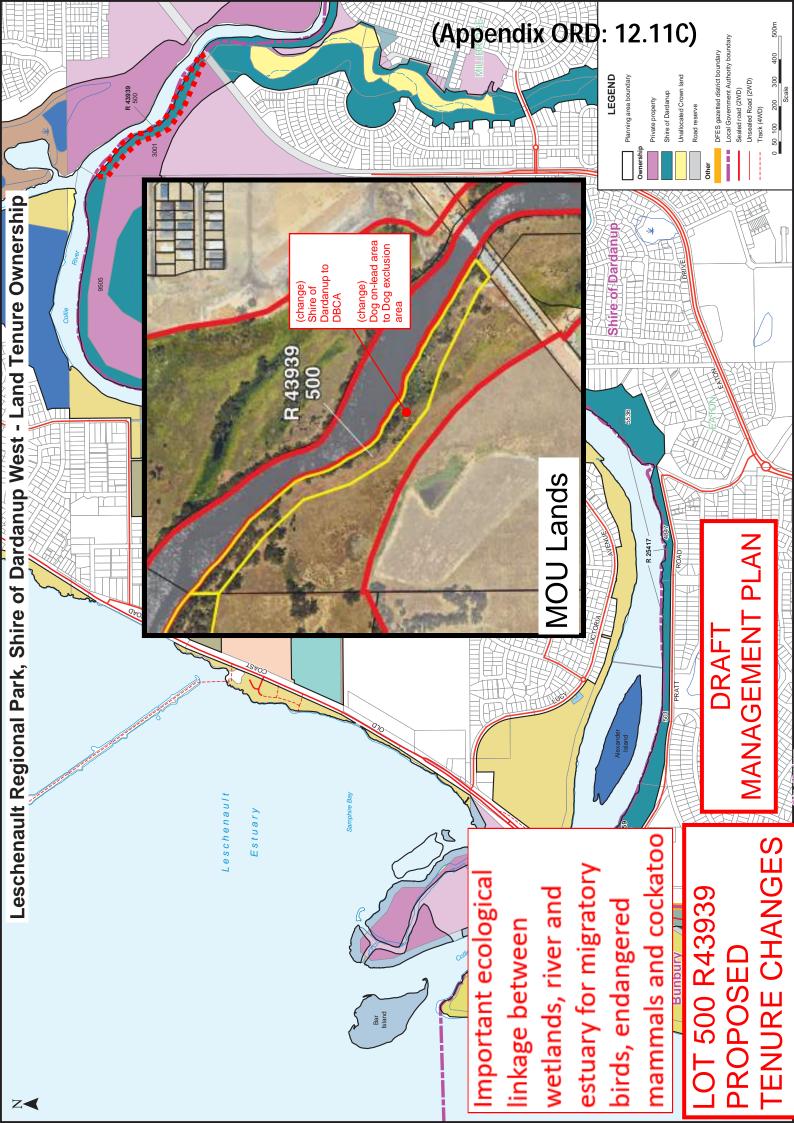
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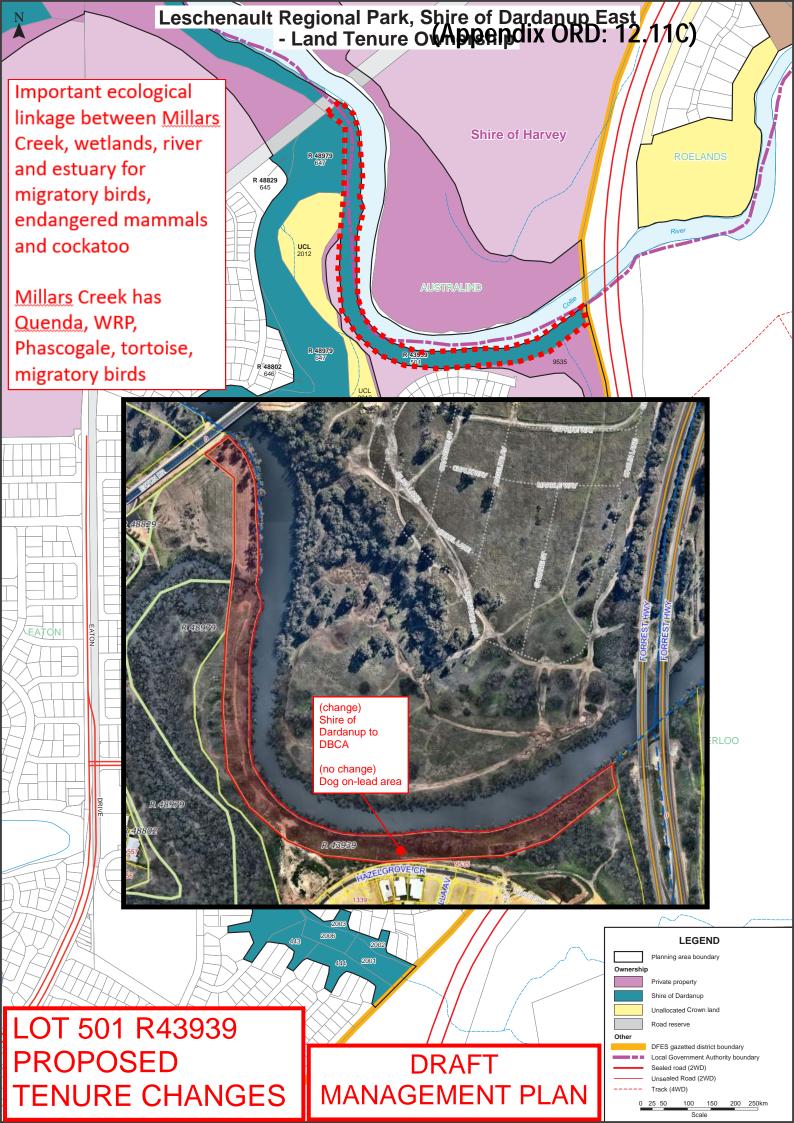
	Highly modified	Recreation	Natural-recreation	Natural
		Moderate to low level of marine	Basic level of marine facilities including beach	No marine facilities provided. Very low to
		facilities including small boat ramps,	access for boat / kayak launching. Low level of	no recreation and commercial craft.
		small jetty or moorings. Low level of	recreation and commercial craft.	
		recreation and commercial craft.		
Management intent	Frequent management presence / on-site manager.	Frequent management presence in the	Occasional management presence including visits	Infrequent management presence.
		area.	by managing agency staff and signs.	
	High degree of on-site management including use of			Permits may be used to control access.
	physical barriers and on-site staff, vehicle and	High to moderate on-site management	Permits may be used to control access.	
	pedestrian movement is heavily controlled. Managed	requirements, including signs and		
	for high levels of visitor use.	barriers, defined paths and controlled		
		recreation opportunities.		
	Provide for sustainable interaction between			
	developments and the adjacent natural areas.			
Access	Easy to access by a full range of vehicles including	Easy to moderate level of accessibility	Moderate to difficult level of accessibility. Four-	Difficult access, mainly four-wheel drive
	two-wheel drive.	for two-wheel drive vehicles sealed or	wheel drive and seasonal two-wheel drive.	only.
		unsealed.		
	Well defined trails including universal access. High		Formed trails with some signage. Moderate to	Some trails formed but with limited
	likelihood <sup>30</sup> that trails <sup>31</sup> will be sealed.	Well defined and signed trails. High to	low likelihood that trails will be sealed.	signposting. Low likelihood that trails
		moderate likelihood that trails will be		will be sealed.
		sealed.		

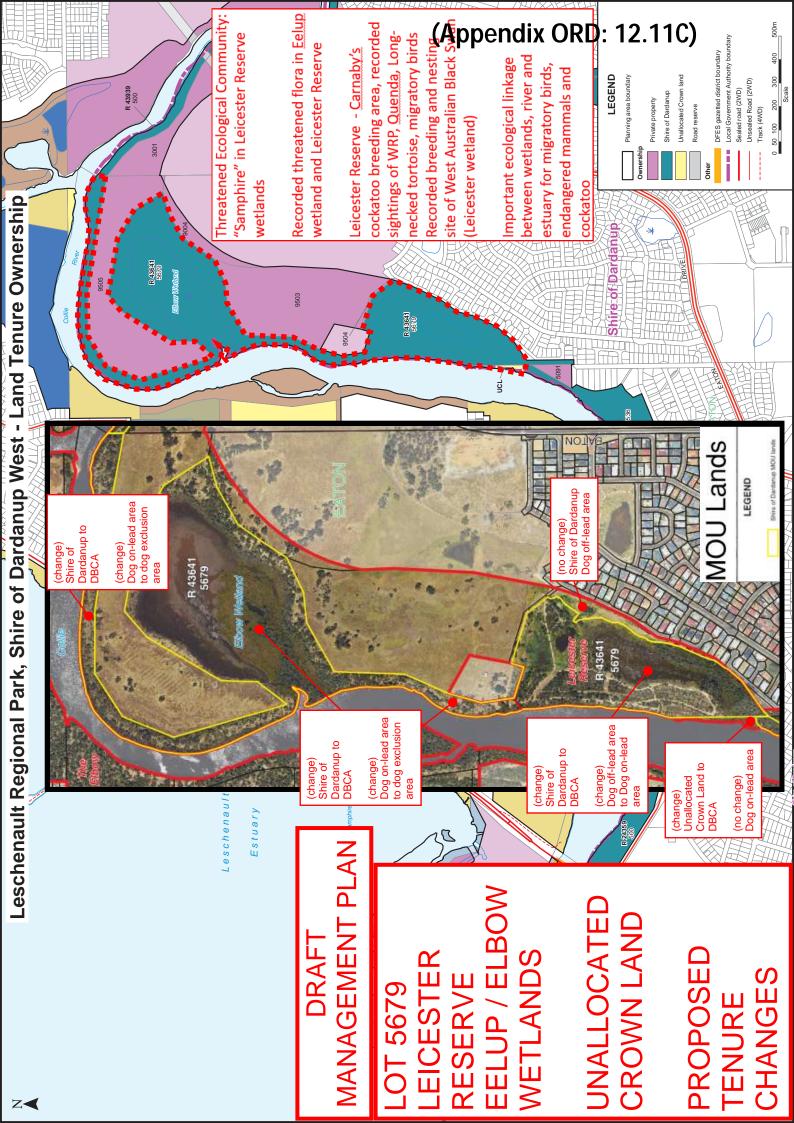
<sup>&</sup>lt;sup>30</sup> The likelihood of sealed trails does not preclude the occurrence of unsealed trails across the settings, and vice versa. <sup>31</sup> For more information on trail classification see the Users guide to the Australian walking track grading system at parks.dpaw.wa.gov.au/activity/bushwalking.

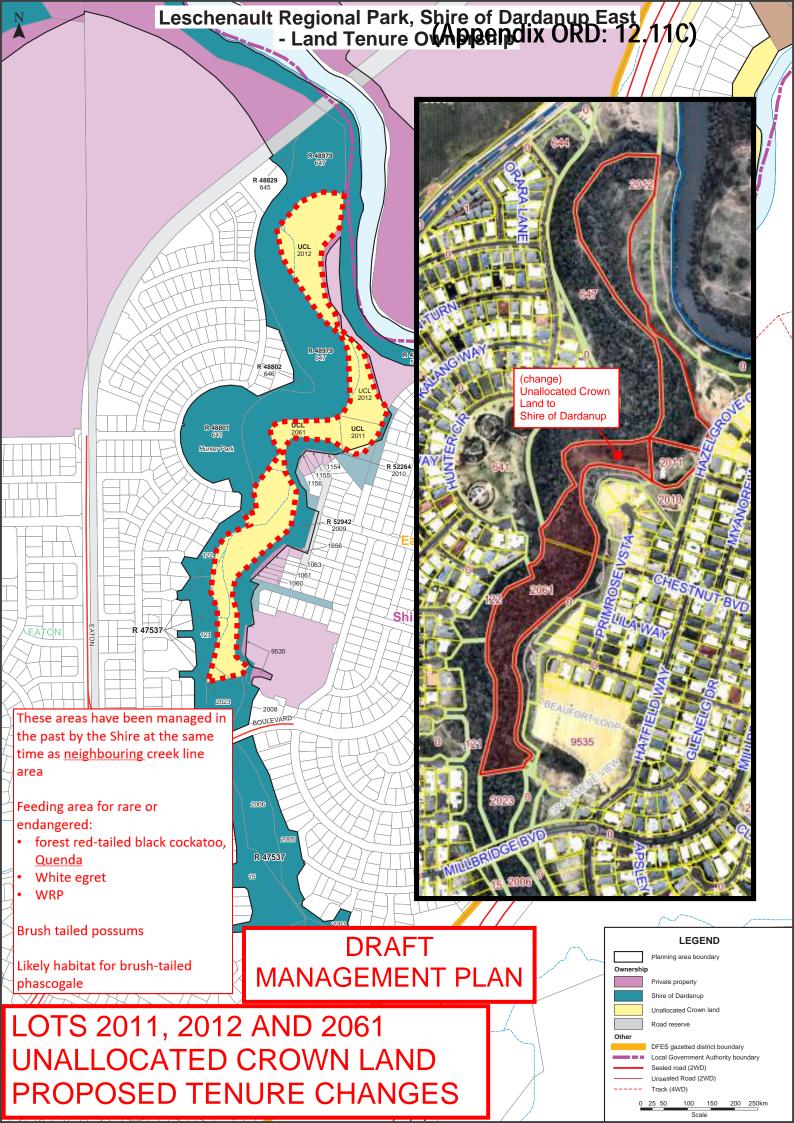
<b>OVERALL RISK EVENT:</b>			RISK A	<b>RISK ASSESSMENT TOOL</b>	100-			
		t of Draft Grea	Endorsement of Draft Greater Bunbury Regior	egional Park Management Plan 2020	nt Plan 2020			
<b>RISK THEME PROFILE:</b>	LE:							
7 - Environment Management 3 - Failure to Fulfil Compliance	<ul><li>7 - Environment Management</li><li>3 - Failure to Fulfil Compliance Requirements (Statutory, Regulatory)</li></ul>	tutory, Regula	tory)					
<b>RISK ASSESSMENT CONTEXT:</b>	CONTEXT:							
		PRIOR	<b>PRIOR TO TREATMENT OR CONTROL</b>	R CONTROL		AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
	RISK EVENT	CONSEQUE NCE	ПКЕЦНООD	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	TIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT t	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION t	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE t	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	Failure to support State Government election promises that may result in positive outcomes for the Shire	Moderate (3)	Possible (3)	Moderate (5 - 11)	Endorse draft management plan	Moderate (3)	Rare (1)	Low (1 - 4)
ENVIRONMENT	Missing out on possible long term environmental benefits to the Shire by not endorsing the draft plan.	Minor (2)	Possible (3)	Moderate (5 - 11)	Endorse draft management plan	Minor (2)	Unlikely (2)	Low (1 - 4)

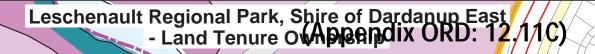












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UCL 2012

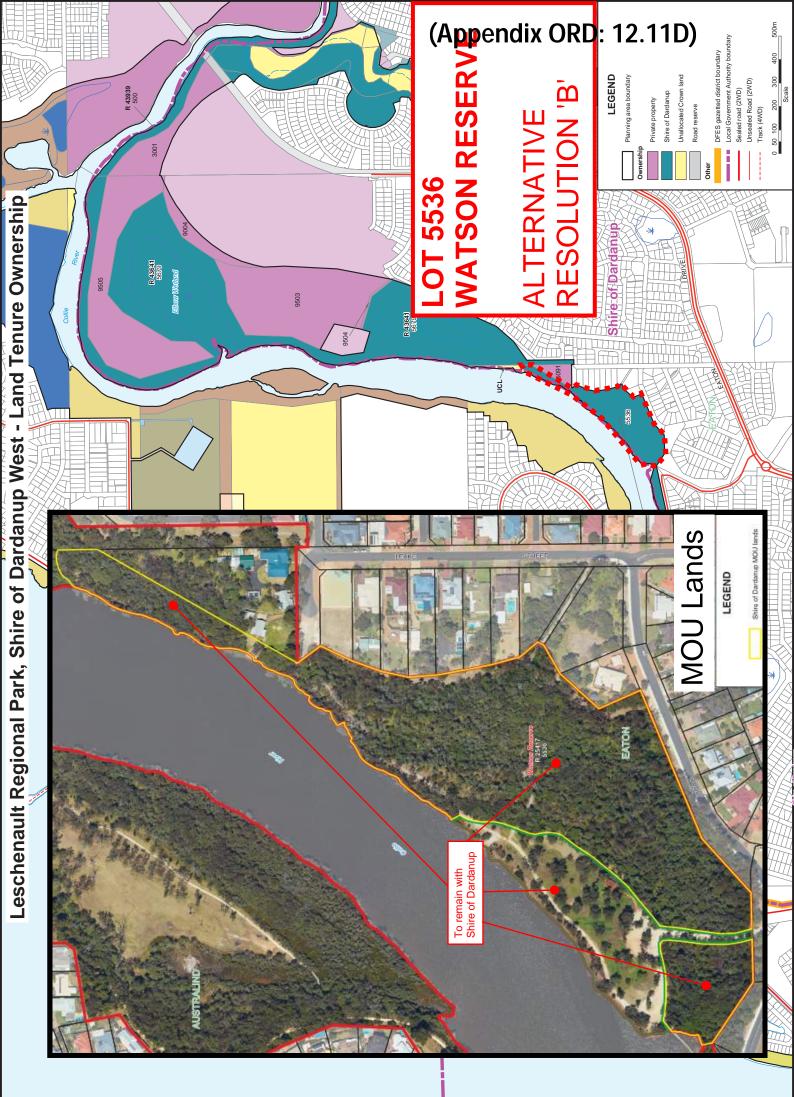
UCL 2011 Shire of Harvey

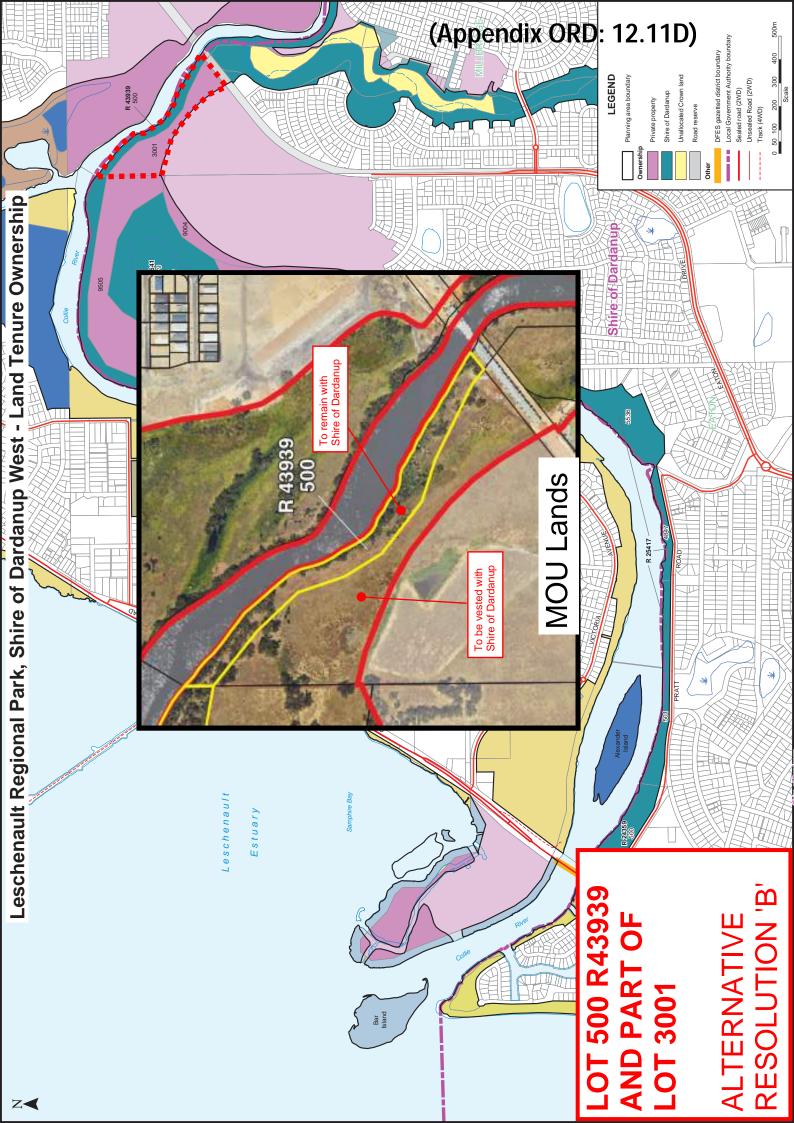
- Subject to planning approval (WAPC 150502), condition requiring foreshore reserve to be ceded (Local Govt clearing agency) and foreshore MP (in consultation with Local Govt, clearing agency DWER)
- To be vested in Shire of Dardanup following implementation of developer commitments

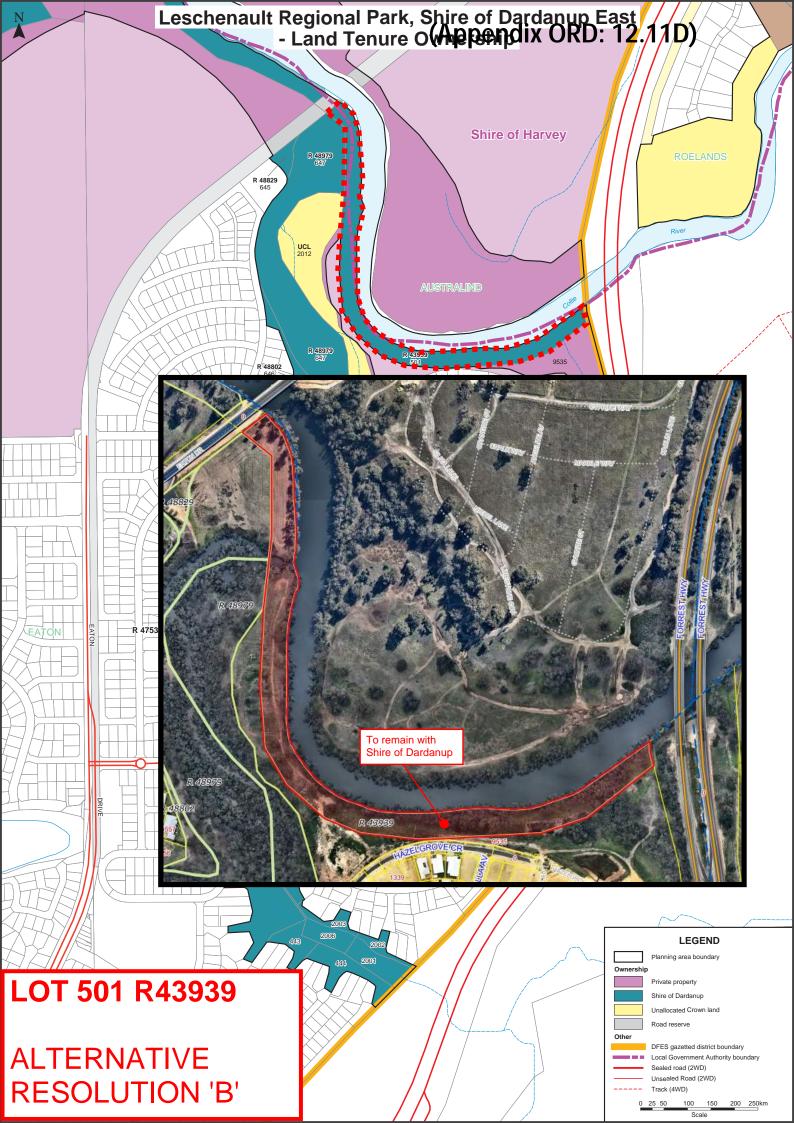
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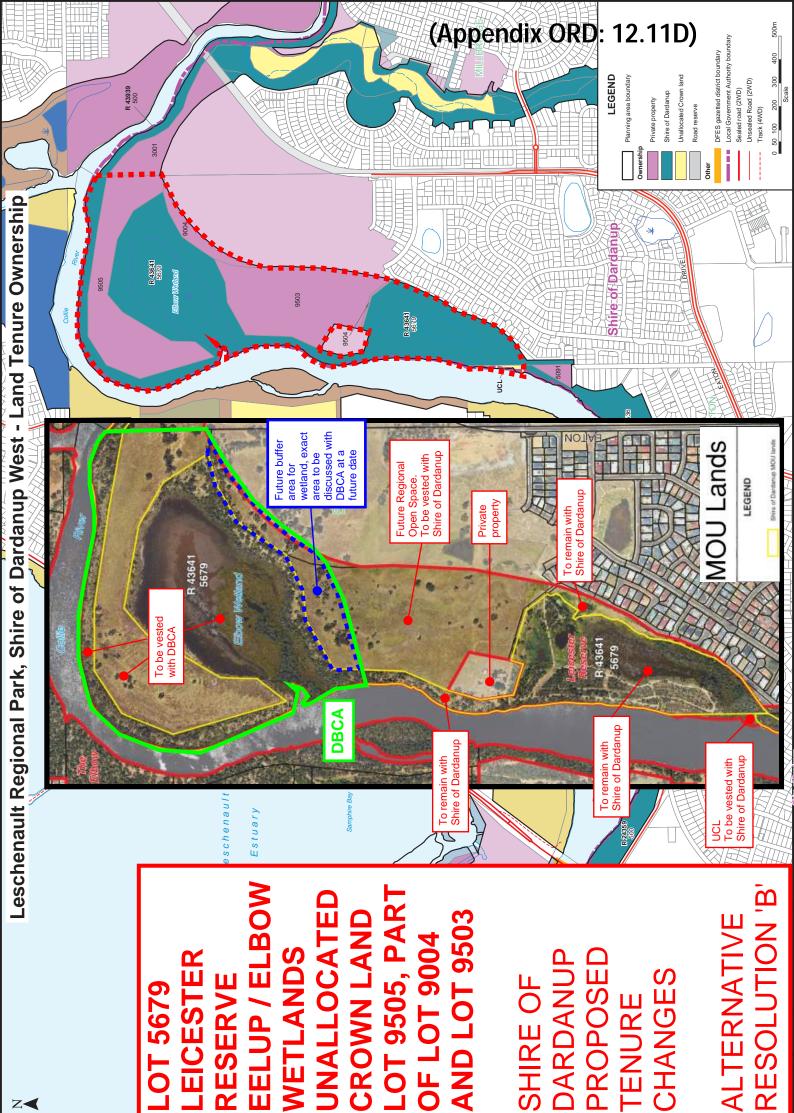
WATERLOO

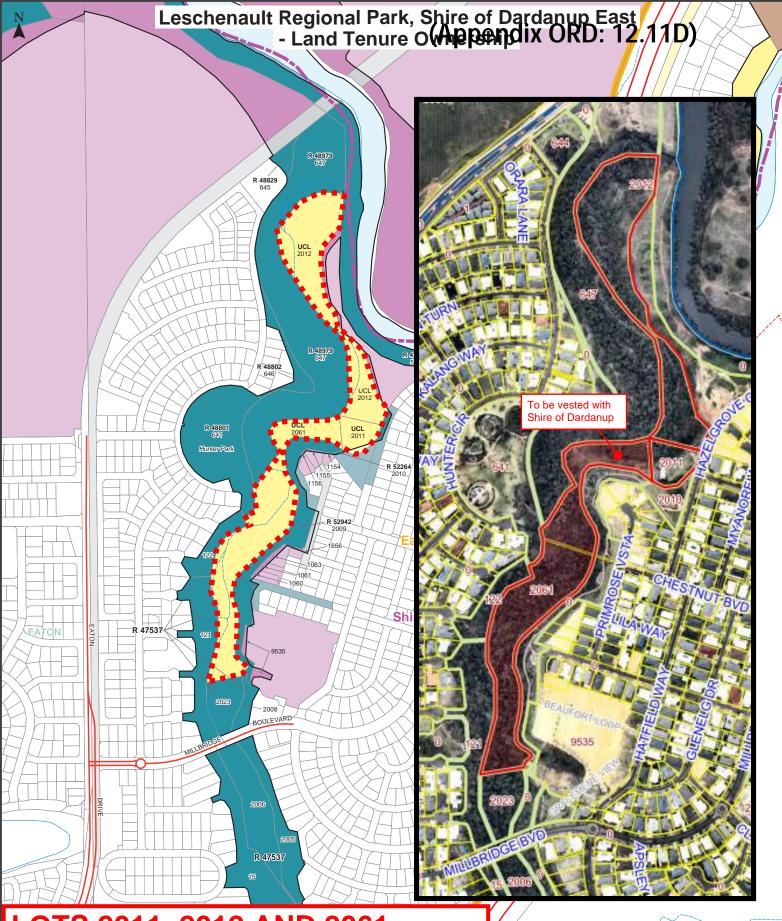






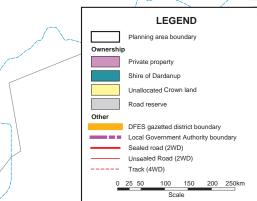


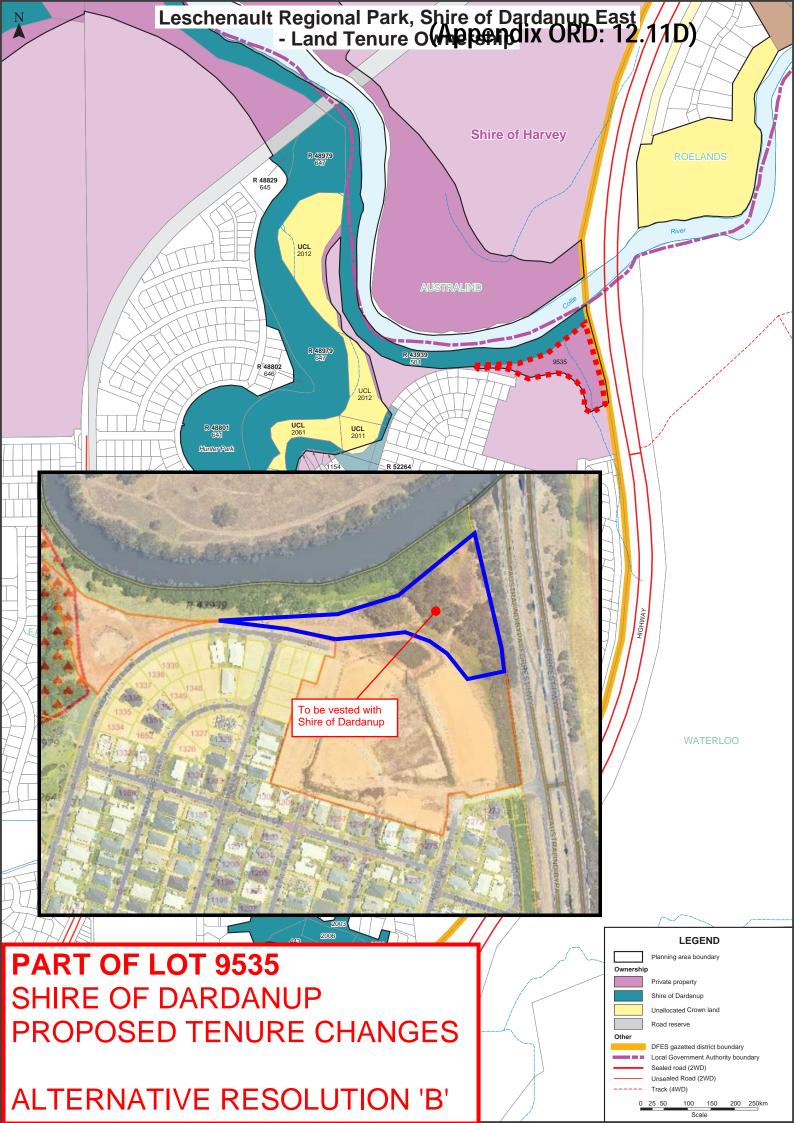




LOTS 2011, 2012 AND 2061 UNALLOCATED CROWN LAND SHIRE OF DARDANUP PROPOSED TENURE CHANGES

# ALTERNATIVE RESOLUTION 'B'







# DRAFT

# WASTE MANAGEMENT PLAN

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JUNE 2020

#### Waste Management Plan Tracking History

Author	Mr Luke Botica – Director Infrastructure
Author	Ms Jackie Nichol – Environment Officer

#### **Revision History**

Version No.	Date	Reason/Comments
1.0	10-06-2020	First Draft
1.1		
1.2		

#### Endorsed by Shire of Dardanup Council

Ordinany Council Monting	Resolution	
Ordinary Council Meeting	Date	

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#### **1. Introduction**

This Plan has been prepared by the Shire of Dardanup to provide direction for improving the waste services delivered by the Shire.

The provision of waste services is an essential and core Shire service.

The Shire is committed to providing an overall waste service that:

- Is efficient and effective.
- Meets the needs and expectations of our community.
- Is cognisant of our environment.
- Strives to divert as much waste from landfill as practicable.
- Is forward looking to new technologies such as waste to energy.
- Provides value for money to our community.

The Shire of Dardanup's Strategic Community Plan 2020-2030 identifies the community's desire to improve waste reduction and recycling and has adopted *Strategy 2.1.3 – Provide our community* with a variety of waste disposal options to minimise the impact of waste disposal on our natural environment.

The Shire's Corporate Business Plan lists the following actions regarding waste management:

*Waste Education* – Undertake one community awareness / education campaign per annum that encourages better waste practices.

*Waste Services* – Provide diverse waste disposal and processing options including General Waste, Recycling and FOGO services to minimise waste going to landfill.

**Regional Waste Management** – Support a regional approach, which may include transfer stations, kerb-side collections, waste education, landfill sites and recycling facilities

The Shire of Dardanup is aware of the State's Waste Avoidance and Resource Recovery Strategy 2030 (Waste Strategy) and has prepared this Waste Management Plan to align the Shire to the strategies and targets set for the state.

The Waste Strategy's material recovery targets for municipal solid waste in the major regional centres are 55% by 2025 and 60% by 2030. The Waste Strategy identifies organics, including food organics and garden organics (FOGO), as a focus material.

The Shire of Dardanup's Waste Management Plan aims to change the Shire's overall waste service to reach these material recovery targets.

This Plan outlines the current services, its strengths and weaknesses, threats and opportunities. It provides a list of strategies to be adopted to address these and takes a close look at the implementation of a FOGO service for the Shire of Dardanup.

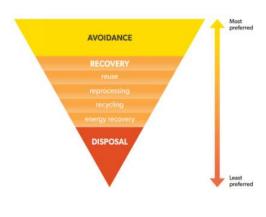
#### 2. Background

In 2019 the State Government released the new waste strategy, the Waste Avoidance and Resource Recovery Strategy 2030 (WARR Strategy), in accordance with the <u>Waste Avoidance and Resource Recovery Act 2007</u> (WARR Act).

The work of the Waste Authority supports the *Waste Avoidance and Resource Recovery Strategy* 2030 (the Waste Strategy) vision: "Western Australia will become a sustainable, low-waste circular economy in which human health and the environment are protected from the impacts of waste."

Along with the vision, this document looks closely at how waste has been used in the past and how it will be managed into the future across the state, with clear objectives that reflect the waste hierarchy (shown below), whereby waste avoidance is the most preferred outcome and disposal is the least preferred:

- Avoid Western Australians generate less waste;
- Recover Western Australians recover more value and resources from waste; and,
- Protect Western Australians protect the environment by managing waste responsibly.



The Waste Strategy outlines the State government's direction with managing waste, which is to target ways to reduce landfill by waste avoidance, recovery and reuse.

The implementation of the Waste Levy in the Perth Metropolitan Area, charged on every tonne that is disposed into landfill, is a tool the State Government uses to encourage greater resource recovery. There is also the potential that the State Government may expand the Levy beyond waste generated or landfilled in the metropolitan area.

An increase in the Levy is expected to reduce waste to landfill and encourage or create new markets that encourage reprocessing, recovery and avoidance outcomes. A large proportion of the Strategy looks at recovery of food organics and garden organics, known as FOGO, as this makes up a substantial part of the current waste stream, and thereby removing it from landfill will meet the vision of increased resource recovery. In addition, the document looks at ways to manage recycled materials by onshore processing and establishing new industries so that recycling materials are no longer sent overseas.

As part of this document, Local Governments are being encouraged to establish their own waste plans. Currently waste plans are only required for Local Governments in the Perth/Peel Region and Regional Centres. The Shire of Dardanup is taking a leadership role in the region and have prepared this Waste Management Plan, without a compulsory requirement to identify how the Shire is proactively managing waste now and into the future.

The Shire has a significant role to play in waste management for residents and businesses and has a long history of collecting data relating to its role in waste management. The Shire has reported annually to the WA Waste Authority, in the form of the Local Government Waste Census, since 2014. This waste management data, reported in the Census, has been utilised in the development of this Plan.

The Shire conducted an online survey in 2016 and found that the community opinion differed regarding ongoing waste management and the introduction of a three-container service. At the time approximately 70% of respondents did not want to introduce the third container service. However, at the 27 November 2019 Ordinary Council Meeting, the Council resolved to further explore the option of introducing a three-container system with a FOGO service. This Waste Management Plan pursues this option and outlines a strategy that utilises FOGO and other activities to improve the Shire waste services into the future.

#### 3. Current Services and Costs

The Shire of Dardanup currently provides five waste services – household refuse collection and disposal, recyclables collection and processing, bulk collection of hard waste and green waste, a transfer station, a series of public bins in public places and waste education.

The Shire does not own or operate a landfill site for the disposal of household waste or commercial waste. Similarly, the Shire does not own or operate a waste fleet. The collection and disposal of household general waste and recyclables is currently contracted.

The Shire operates a waste transfer station which is situated on a leased site accessed from Banksia Road. The transfer station receives waste from the Shire's rural residents who are not provided with a collection and disposal/processing service. It is also available to any member of the general public for waste disposal, drop-off of particular items, such as oil, green waste, mattresses and batteries, and also provides opportunity for the public to purchase salvaged items such as furniture and other household items.

The Shire has several contracts in place for the delivery of its waste services:

- Collection of waste from 240L containers, both general and recyclables currently contracted to Cleanaway.
- Supply, delivery and repair of 240L containers currently contracted to Cleanaway.
- Disposal of household and general waste currently contracted to Cleanaway.
- Processing of recyclables currently contracted to Suez.

The Shire uses various contractors for the disposal and collection of salvaged and recycled items from the transfer station.

The Shire currently provides one bulk hard waste collection and two bulk green waste collections per annum. This service is currently contracted to Steann Pty Ltd.

The Shire also accesses a regional waste coordinator for an annual fee to provide waste education and community consultation. This service is shared with a number of other local governments in the region.

The following table provides a summary of the waste services provided and the expected cost for the 2020-2021 financial year:

Item	Description of Service	Annual Cost					
1	Current Waste Service 1 – Household Refuse Collection and Disposal	\$570,305					
2	Current Waste Service 2 – Recyclables Collection and Disposal						
3	Current Waste Service 3 – Bulk Collection Hard Waste and Green Waste	\$70,318					
4	Current Waste Service 4 – Transfer Station	\$488,828					
5	Current Waste Service 5 – Public Bins						
6	Current Waste Service 6 – Waste Education	\$22,374					
7	Depreciation	\$2,000					
	TOTAL ANNUAL COST						

The current charge (for 2020/2021) for a household waste collection service (general waste and recycling) is \$225.70 per service per annum and the bulk waste collection service is between \$16 to \$32 based on GRV with the average being \$22.00 per service per annum.

The individual waste services provided by the Shire is described in more detail in the Plan.

#### Current Waste Service 1 – Household Refuse Collection and Disposal

This service is provided only to residential areas and semi-rural areas. It is currently not available to rural areas due to the risks associated with the waste containers being placed on road verges and the collection truck frequently stopping on high speed roads and areas of poor sight distances.

The collection service is provided weekly all year round.

The collection, transport and disposal of household waste is currently fully outsourced and is under a separate contract to the disposal. However, both contracts are currently held by the same contractor.

Waste containers are predominantly of the 240L type and are fully owned by the Shire. The supply of new containers and the repair of existing containers is currently outsourced. The contractor is the same contractor as for the collection, transport and disposal. The contract has provision for 140L and 360L containers; however, there has been no uptake of the larger containers at this stage. There is a small uptake of the smaller containers in the local retirement village, although, this only makes up a very small proportion of the overall services provided throughout the Shire.

The following information provides an overview of the service, its current cost and an analysis of its strengths, weaknesses, opportunities and threats.

#### **Container Provision**

Container Type	Owner	Supplier	Contract Expiry
240L	Shire of Dardanup	Contracted - New, Replacement & Repair	30 June 2023
Wheelie Bin		(together with container supply for recyclables)	

#### **Collection**

Frequency	<b>Collection Provider</b>	Contract Expiry	Description
Weekly	Contracted	30 June 2023	Individual lift into compactor truck and delivery to landfill
			site

#### Disposal

Disposal Provider	Contract Expiry	Description
Contracted	30 June 2021	Disposal within the Shire – Class 2 facility required

#### **Items Collected**

Items	Currently Sent to Landfill?	Could be Diverted from Landfill?
Food Organics & Garden Organics (FOGO)	Yes	Estimated 1,900 tonnes pa
Soft plastics, single use plastics	Yes	No
Batteries and e-waste	Yes	Yes
Clothing and fabrics	Yes	Yes

#### Service Figures for 2020-2021

Services	Annual	Average	Total Annual	Container	Total Annual	Annual Disposal	Total Cost of
	Tonnage	Tonnage per	Container	Annual	Collection Cost	Cost	Service
		Household	Costs	Depreciation			
		per annum		Cost			
5,580	4,465	0.80	\$5,000	\$0	\$355,129	\$210,176	\$570,305

strengths, weaknesses, opportainties a rineats	
Landfill operations situated in the immediate district – transport costs are not a significant impost in operations.	Strength
Disposal to landfill is a relatively low cost	Strength
Although separate contracts, there is currently the same contractor for container provision, collection and disposal – no incompatibility issues and crossover problems	Strength
The Shire does not provide a continuous waste education and awareness campaign due to limited staff resources.	Weakness
Separate contracts for container provision, collection and disposal could result in different contractors and incompatibility issues and crossover problems	Weakness
Introduction of landfill levy in future significantly increasing the costs	Threat
State Government imposing landfill targets in future	Threat
State Government imposes the requirement for a FOGO service to be implemented	Threat
There is a significant portion of items that within the household stream that can be diverted from landfill	Opportunity
It is estimated that there is a significant portion of FOGO – in the vicinity of 46%. This is sufficient FOGO generated to consider a separate FOGO service.	Opportunity
WA Waste Authority has released the Better Bins Program which offers funding for the implementation of a FOGO service.	Opportunity
Batteries, e-Waste and Clothing recovery opportunities are currently possible.	Opportunity
Local industry supports and is exploring Waste to Energy. General household waste could be diverted to Waste to Energy when available.	Opportunity

#### Current Waste Service 2 – Recyclables Collection and Disposal

This service is provided only to residential areas and semi-rural areas. It is currently not available to rural areas due to the risks associated with the waste containers being placed on road verges and the collection truck frequently stopping on high speed roads and areas of poor sight distances.

The collection service is provided fortnightly all year round.

The collection, transport and disposal of household recyclables is currently fully outsourced and is being delivered by a separate contractor to the processing contractor.

Waste containers are predominantly of the 240L type and are fully owned by the Shire of Dardanup. The supply of new containers and the repair of existing containers is currently outsourced.

The following information provides an overview of the service, its current cost and an analysis of its strengths, weaknesses, opportunities and threats.

#### **Container Provision**

Container Type	Owner	Supplier	Contract Expiry
240L Wheelie Bin	Shire of Dardanup	Contracted - New, Replacement & Repair (together	30 June 2023
		with container supply for household waste)	

#### **Collection**

Frequency	Collection Provider	Contract Expiry	Description
Fortnightly	Contracted	30 June	Individual lift into compactor truck and delivery to
		2023	recycling receival depot

#### Disposal

Disposal Provider	Contract Expiry	Description
Contracted	30 June 2023	Recyclables received in local depot of contractor and then transported to MRF in metropolitan area

#### **Items Collected**

Items	Currently	Is Currently	Sent to Landfill?	Could be Diverted
	Collected?	Recycled?		from Landfill?
Hard plastics	Yes	Yes	Only if not empty and/or not clean	Yes
Tins and metal cans	Yes	Yes	Only aerosol cans	No
Paper and	Yes	Yes	Only if contaminated	Yes
cardboard				
Glass	Yes	Yes	No	-
UHT Cartons	Yes	No	Yes	-
Bottle tops	Yes	No	Yes	Yes
Plastic lids	Yes	No	Yes	Yes
Aluminium cans	Yes	Yes	Only if not empty and/or not clean	Yes

#### Service Figures for 2020-2021

Services	Annual Tonnage	Average Tonnage per Household per annum	Total Annual Container Costs	Container Annual Depreciation Cost	Total Annual Collection Cost	Annual Disposal Cost	Total Cost of Service
5,510	1,228	0.22	\$5,000	\$0	\$149,935	\$121,981	\$276,916

Recyclables receival depot situated in the immediate district – transport costs are not a significant impost in operations.	Strength
Disposal of recyclables contract is based on sliding scale which provides the opportunity to reduce the disposal costs if recyclables are less contaminated.	Strength
The Shire does not provide a continuous waste education and awareness campaign due to limited staff resources.	Weakness
Contaminants and poorly presented items resulting in non-recycled items.	Weakness
China Sword and other market changes resulting in less actual recycling and more going to landfill.	Threat
Contaminants from as little as one bin affecting an entire truckload – resulting in a significant proportion of recyclables going to landfill.	Threat
There are still more items within the household stream that could be diverted from landfill.	Opportunity
Contaminated cardboard and paper is suitable for a FOGO service and could be diverted from landfill.	Opportunity
Introduction of Container Deposit Scheme and a possible FOGO service could reduce the volume of recyclables allowing a reduction in collection frequency and costs.	Opportunity

#### Current Waste Service 3 – Bulk Collection Hard Waste and Green Waste

This service is provided only to residential areas and semi-rural areas. It is currently not available to rural areas due to the risks associated with waste being placed on road verges and its collection on high speed roads and areas of poor sight distances.

The service currently consists of one bulk hard waste collection and two bulk green waste collections.

The collection, transport and disposal of bulk hard waste and bulk green waste is currently fully outsourced. The contractor undertakes the collection of bulk hard waste and bulk green waste usually with a skidsteer loader, labour and waste trucks.

Bulk hard waste is transported by the contractor for disposal at a local landfill. The contractor also salvages materials from the collection. A significant proportion of bulk hard waste placed on verges is salvaged voluntarily by the general public prior to the contractor arriving.

Bulk green waste is transported by the contractor to the local composting facility.

The following information provides an overview of the service, its current cost and an analysis of its strengths, weaknesses, opportunities and threats.

<u>conection</u>				
Туре	Frequency	<b>Collection Provider</b>	Contract Expiry	Description
Hard Waste	Once pa	Contracted	30 June 2022	Collection from residential verges and transport to landfill
Green Waste	Twice pa	Contracted	30 June 2022	Collection from residential verges and transport to Composting Facility

#### Disposal

Collection

Туре	Disposal Provider	Contract Expiry	Description
Hard Waste	Contracted	30 June 2023	Disposed under the Waste Disposal Contract. Charged per tonne delivered to the gate.
Green Waste	Gate Fee	-	Disposed to the Composting Facility. Charged per tonne delivered to the gate.

#### **Items Collected**

Туре	ltems	Currently Collected?	Is Currently Recycled?	Sent to Landfill?	Could be Diverted from Landfill?
Hard Waste	White goods	Yes	Contractor recycles some degassed items. Some re- use by public reducing quantity to be picked up	Items in poor condition	Yes
	Furniture	Yes	No, but some re-use by public reducing quantity to be picked up	Yes	Yes
	e-Waste	Yes	No, but some re-use by public reducing quantity to be picked up	Yes	Yes
	General items as per guidelines	Yes	No, but some re-use by public reducing quantity to be picked up	Yes	Some items
Green Waste	Green waste as per guidelines	Yes	Yes, sent to composting facility	No	-

#### **Service Figures**

Туре	Annual Tonnage	Collection Cost	Disposal/Processing Cost	Total Cost of Service
Hard Waste	181	\$26,008	\$8,867	\$34,875
Green Waste	311	\$44,310	\$8,058	\$52,368
Combined	492	\$70,318	\$16,925	\$87,243

Service has been in operation in this format from 10+ years and well used.	Strength
Re-use of items through community collecting someone else's unwanted items and diverting from landfill.	Strength
Limited bulk waste contractors available – restricts the available time of year for collection due to other competing Councils.	Weakness
Limited bulk waste contractors available that have appropriate set-up and experience for this task – if contractor is unavailable service may be delayed or unable to be delivered.	Threat
Loose items on the verge pose a fire threat and can be affected by storms and winds, resulting in possible hazards.	Threat
To incorporate the requirement for the bulk waste contractor to recycle and salvage items further.	Opportunity
The introduction of a FOGO service could reduce the need for a bulk green waste collection.	Opportunity

#### **Current Waste Service 4 – Transfer Station**

This service is situated on a leased site accessed from Banksia Road. The site is approximately 1.7 hectares in area and consists of a small site office, waste drop-off ramp, various waste, recycling and salvage bins, and stockpile areas. The site is only partially sealed internally and is predominantly gravel hardstand except for the sealed waste drop-off ramp.

The transfer station receives waste from the Shire's rural residents who are not provided with a collection and disposal/processing service. It is also available to any member of the general public for waste disposal, drop-off of particular items, such as oil, green waste, mattresses and batteries, and also provides opportunity for the public to purchase salvaged items such as furniture and other household items.

The site is situated next to a composting facility, which receives any green waste delivered to the transfer station.

The site is open five days per week and closed on Tuesdays and Thursdays, being the two least busy days of the week. The transfer station is staffed by two attendants with overlapping rosters to ensure that the transfer station is staffed at all times and has two attendants present together during the busiest days and times.

The transfer station charges a gate fee depending on the items delivered and the size of loads. The Shire does not issue tip passes. However, the Shire has offered free use of the site to community groups and not-for-profit organisations on occasions.

The following information provides an overview of the service, its current cost and an analysis of its strengths, weaknesses, opportunities and threats.

Days	Times	Personnel	Access
Monday	8.30am – 4.00pm	1	Public drive-in access, no commercial waste accepted
Tuesday	Closed	-	-
Wednesday	8.30am – 4.00pm	1	Public drive-in access, no commercial waste accepted
Thursday	Closed	-	-
Friday	8.30am – 4.00pm	2	Public drive-in access, no commercial waste accepted
Saturday	8.30am – 4.00pm	2	Public drive-in access, no commercial waste accepted
Sunday	8.30am – 4.00pm	2	Public drive-in access, no commercial waste accepted

#### **Operation Times**

Items Collected	All		Contractor	Annual	0	Annual
Item	Allowed?	Is Currently Recycled or Salvaged?	Sent to or Collected by?	Annual Tonnage Diverted from Landfill	Annual Tonnage to Landfill	Annual Contractor Cost to Dispose / Recycle / Salvage
General Waste	Yes	No	Contractor Landfill		1171	\$122,082
Green waste	Yes	Yes	Composting facility	170		\$14,633
Cardboard	Yes	Yes	Composting facility	170		
Household Recyclables	Yes	Yes	Contractor facility	45		\$1,534
"Tip-shop" items	Yes	Yes	Sold on site for gold coin donation	37		
Household hazardous (paint, spray cans, gas bottles, bottled chemicals	Yes	Yes	Regional Waste Facility	No data		
Fluoro lights/bulbs	Yes	Yes	Regional Waste Facility	No data		
e-Waste	No	-	-	-		
Scrap steel – in pile	Yes	Yes	Scrap Metal Contractor	35		Free of charge
Scrap steel – in skip bin	Yes	Yes	Scrap Metal Contractor	200		0
Scrap aluminium	Yes	Yes	Scrap Metal Contractor	250		0
Aluminium cans	Yes	Yes	Scrap Metal Contractor	20		0
Mixed metals – copper, brass, stainless steel	Yes	Yes	Scrap Metal Contractor	0.4		0
Waste oil	Yes	Yes	Waste Oil Contractor	5		0
Mattresses	Yes	No	Regional Waste Facility		6	0
Car batteries	Yes	Yes	Scrap Metal Contractor	1.5	1.5	0
Tyres/rims and rubber	Yes	Yes	Contractor	3		\$1,600
White goods	Yes	Partly	Scrap Metal Contractor	0.5	1.4	0
Commercial Waste	No	-	-	-	-	
Inert Construction Waste	No	-	-	-	-	

#### **Items Collected**

#### Service Figures

Operational Costs including staff	Disposal General Waste	Recycling / Recovery Processing	Skip Bin Hire & Transport	Green Waste Processing	Total Cost of Service
\$391,662	\$53,590	\$2,076	\$34,000	\$7,500	\$488,828

Transfer station is located in a relatively central location for the rural population, who do not have a waste collection service.	Strength
Transfer station prices are similar with other transfer stations in the region.	Strength
Composting facility and landfill facility are situated in immediate vicinity of the transfer station, thus minimising transport costs.	Strength
The transfer station is relatively small and simple in layout. Space for expansion is limited.	Weakness
Further expenditure on fixed improvements, such as sealing of roads, may be lost if the transfer station is relocated.	Weakness
The transfer station site is situated on privately owned land. Use of the land is subject to a lease agreement.	Threat
Composting facility next to the transfer station is expected to move and the move is expected to increase transport costs.	Threat
The Shire owns land next to the transfer station and the transfer station could be relocated there, improved and expanded.	Opportunity

#### Current Waste Service 5 – Provision of Public Bins

The Shire of Dardanup provides public bins within its developed parks and reserves.

Currently, the Shire does not provide for the separation of waste into general waste and recyclables at its public bins. All waste is disposed into a single bin regardless of its nature.

The collection service is generally provided weekly all year round. However, during summer months and in high use areas, such as the Eaton Foreshore and Watson Reserve, public bins are collected twice each week – Mondays and Fridays.

The collection, transport and disposal of waste from public bins is currently fully outsourced. This service forms part of the household collection contract.

Waste containers are predominantly of the 240L type and are fully owned by the Shire. The supply of new containers and the repair of existing containers is currently outsourced. This contract is being held by the same contractor as the collection, transport and disposal.

The following information provides an overview of the service, its current cost and an analysis of its strengths, weaknesses, opportunities and threats.

#### **Items Collected**

ltem	Bin Provided?	Collection Provider	Disposal Provider
General Waste	Yes	Contracted (same contractor as household container pick up)	Contracted
Recyclables	No	-	-
Other waste?	No	-	-

#### Service Figures

No of	Annual	Annual Cleaning	Total Annual Servicing	Total Cost of Service
bins	Tonnage	Cost	Cost	
46	10	\$500	\$10,000	\$10,500

There are currently no options for disposing recyclables.	Weakness
Further development of the Eaton Town Centre and other towns would be conducive to introducing recycling option to CBD bins	Opportunity

4. Waste Management Improvement Strategy

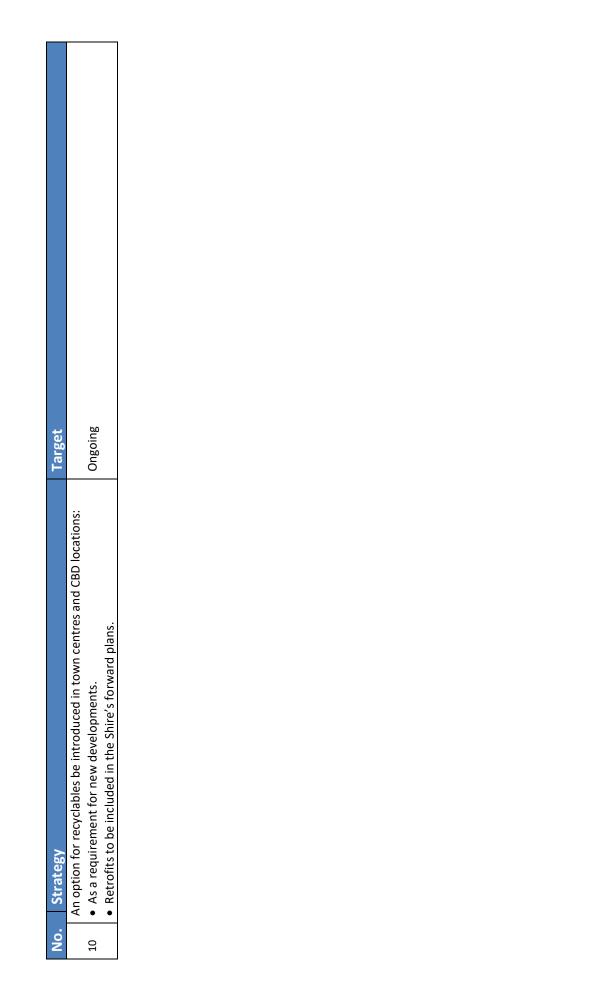
The following table lists the overall weaknesses, threats and opportunities available to the current waste services provided by the Shire of Dardanup and lists the strategies identified to address these.

Item to be addressed		Strategy
The Shire does not provide a continuous waste education and awareness campaign due to limited staff resources.	Weakness	Council to consider engaging a part-time or casual waste officer or make it a part of any new waste contract (i.e. undertaken by contractor).
Separate contracts for container provision, collection and disposal could result in different contractors and incompatibility issues and crossover problems.	Weakness	Call tenders with opportunity for multiple contracts or a single contract to cover provision of containers, collection, and disposal of general, recyclables and FOGO waste streams and consider the potential impacts of the tender on current contracts.
Introduction of landfill levy in future significantly increasing the costs	Threat	
State Government imposing landfill targets in future.	Threat	
State Government imposes the requirement for a FOGO service to be implemented	Threat	
There is a significant portion of items that within the household stream that can be diverted from landfill	Opportunity	Introduce FOGO Service to divert waste from landfill and change recyclable
It is estimated that there is a significant portion of FOGO – in the vicinity of 46%. This is sufficient FOGO generated to consider a senarate FOGO service	Opportunity	collection to optimal mequency.
WA Waste Authority has released the Better Bins Program which offers funding for the implementation of a FOGO service.	Opportunity	
The introduction of a FOGO service could reduce the need for a bulk green waste collection.	Opportunity	
There is a significant portion of items that within the household stream that can be diverted from landfill	Opportunity	Advocate government to make changes to reduce the use of single use, non- recyclable plastics
Batteries, e-Waste and Clothing recovery opportunities are currently possible.	Opportunity	<ul> <li>Improve waste recovery through:</li> <li>Support of business initiatives for recovery of e-waste, batteries, clothing and other materials.</li> <li>Seeking funding opportunities for recovery initiatives.</li> </ul>
Local industry supports and is exploring Waste to Energy. General household waste could be diverted to Waste to Energy when available.	Opportunity	Council to continue to explore opportunities with the State, local government and private industry for the establishment of a waste to energy plant in the South West or access to an existing plant.

Item to be addressed		Strategy
Limited bulk waste contractors available – restricts the available time of year for collection due to other competing Councils.	Weakness	
Limited bulk waste contractors available that have appropriate		
set-up and experience for this task – if contractor is unavailable	Threat	Consider a joint bulk waste collection contract with other local governments in
service may be delayed or unable to be delivered.		the region to ensure the service is viable and competitive and scope to include
Loose items on the verge pose a fire threat and can be affected	Thurst	increased recycling and salvage of items.
by storms and winds, resulting in possible hazards.	ווובמו	
To incorporate the requirement for the bulk waste contractor to	Onnorth in it.	
recycle and salvage items further.		
The transfer station is relatively small and simple in layout. Space	Moduade	
for expansion is limited.		
Further expenditure on fixed improvements, such as sealing of	Modbacc	
roads, may be lost if the transfer station is relocated.	WEAKIIESS	Develop plans for the relocation of the transfer station to the neighbouring
The transfer station site is situated on privately owned land. Use	Throat	Shire owned site.
of the land is subject to a lease agreement.	ווובמו	
The Shire owns land next to the transfer station and the transfer	Occertionity	
station could be relocated there, improved and expanded.		
Composting facility next to the transfer station is expected to	Throat	Consider options for the treatment of green waste on site at the transfer
move and the move is expected to increase transport costs.	ווובמו	station, such as chipping and mulching or arrangements for efficient transport.
There are currently no options for disposing recyclables.	Weakness	An option for recyclables be introduced in town centres and CBD locations:
		<ul> <li>As a requirement for new developments.</li> </ul>
Further development of the Eaton Town Centre and other towns would be conducive to introducing recycling option to CBD bins.	Opportunity	<ul> <li>Retrofits to be included in the Shire's forward plans.</li> </ul>

No.	Strategy	Target
Ч	Council to consider engaging a part-time or casual waste officer or make it a part of any new waste contract (i.e. undertaken by contractor).	Consideration to be given for 2021-22 FY
2	Call tenders with opportunity for multiple contracts or a single contract to cover provision of containers, collection, and disposal of general, recyclables and FOGO waste streams and consider the potential impact of the tender on current contracts.	Contract to commence 1 July 2021
3	Introduce FOGO Service to divert waste from landfill and change recyclable collection to optimal frequency.	Service to commence 1 July 2021
4	Advocate government to make changes to reduce the use of single use, non-recyclable plastics	Ongoing
D	<ul> <li>Improve waste recovery through:</li> <li>Support of business initiatives for recovery of e-waste, batteries, clothing and other materials.</li> <li>Seeking funding opportunities for recovery initiatives.</li> </ul>	Ongoing
6	Council to continue to explore opportunities with the State, local government and private industry for the establishment of a waste to energy plant in the South West or access to an existing plant.	Ongoing
7	Consider a joint bulk waste collection contract with other local governments in the region to ensure the service is viable and competitive and scope to include increased recycling and salvage of items.	To be arranged with other local governments
8	Develop plans for the relocation of the transfer station to the neighbouring Shire owned site.	Plans prepared by 30 June 2022
6	Consider options for the treatment of green waste on site at the transfer station, such as chipping and mulching or arrangements for efficient transport.	To be determined prior to relocation of composting facility.

The following table is a summary of identified strategies and recommended timeframes:



#### 5. Proposed Waste Services and Estimated Costs

The State Waste Strategy advocates FOGO as the most effective means of recovering waste and reducing the amount of waste going into landfill. In the Shire of Dardanup, the introduction of a FOGO collection via a third container is expected to reduce waste to landfill in the range of 40% to 50% as compared to the current two container system.

The Shire of Dardanup Waste Management Plan includes a strategy to introduce a FOGO service by 1 July 2021. In March 2020, the Waste Authority launched its Better Bins Plus program which offers funding to local governments who implement a FOGO service. Under this program, the Shire would be eligible to receive \$23 per service if a FOGO service is introduced as of 1 July 2021.

FOGO is expected to shift a considerable amount of waste from the household refuse stream to the FOGO. Similarly, it is anticipated that some recyclables will also be shifted from the household refuse stream, however, this is not expected to be a significant amount. However, it is expected to have a positive effect on the contamination levels experienced in the recyclable stream by shifting cardboard, a major source of contaminants in the recyclables stream, to the FOGO service. This has the added benefit of reducing the processing charge rate as per the current recyclables processing contract as well as shifting cardboard to a service with a lower price per tonne processing charge.

The container deposit scheme will be introduced later this year, and this too is expected to reduce the overall quantity of recyclables, albeit only expected to be a relatively modest amount.

With the shift of some recyclables to the FOGO service and other non-shire delivered services related to the container deposit scheme, it may be possible to reduce the frequency of collection of recyclables containers.

During a waste survey conducted in 2016, some residents raised concerns regarding the proposed changes in collection frequencies as a result of the possible introduction of a FOGO service. Under a three-container system, the household refuse container collection would be reduced from weekly collections to fortnightly. Concerns related to the suitability of the increased time between collections for some refuse items such as nappies. However, three-container services, with fortnightly collection of household refuse containers, has been in operated successfully in other local government areas for several years now.

FOGO is currently in operation in all local governments that currently share a border with the Shire of Dardanup. Further to this, an organics processing facility is situated with the Shire of Dardanup next to the Shire of Dardanup's waste transfer station.

#### Analysis of a Possible FOGO Service

An analysis of the costs and increases of implementing a three-container system with FOGO has been undertaken and is compared to the current arrangements. Four options are demonstrated here, with Option 1 being a status quo position and Options 2, 3 and 4 being variations of the three-container system.

#### **Option 1** – retain the existing service.

- 240L household refuse container collected weekly.
- 240L recyclables container collected fortnightly.
- One bulk hard waste and two bulk green waste collections each year.
- This combination of waste services is estimated to cost \$917,539 per annum (non-indexed).

**Option 2** – Obtain WA Waste Authority Better Bins Plus funding and implement FOGO service and changes to existing services to meet funding conditions.

- Purchase and distribute new 140L household refuse containers.
- Replace lids on existing 240L household refuse containers to convert them to FOGO containers.
- 140L household refuse container collected fortnightly.
- 240L recyclables container collected fortnightly.
- 240L FOGO containers collected weekly.
- One bulk hard waste and one bulk green waste collections each year.
- This option is expected to be eligible for \$128,000\* through the Waste Authority's Better Bins Plus Program
- The cost of supply and delivery of new containers, replacement lids, modifications to existing bins and other materials is estimated to cost \$481,500 and is subsidised by the Better Bins Plus funding, reducing the net cost to \$353,500. It is made up of the following costs:
  - Supply of new 140L containers at \$264,400 (reduced to \$136,400 using Better Bins Plus funds).
  - Supply of new lids to existing containers to convert to FOGO colour scheme at \$79,935.
  - Supply of kitchen caddies and caddie liners at an estimated total of \$56,000.
  - Delivery and lid changes at \$81,165.
- This service is expected to cost \$429,611 more than Option 1 in the first year.
- It is estimated that the new service arrangement will cost \$81,296\*\* more than the existing service from Year 2 onwards.

**Option 2A** – As per Option 2 except with an initial increased frequency of refuse collection. This is in response to the household refuse service reducing to a 140L container and to assist transition to a fortnightly collection.

• Weekly collection of 140L household refuse container for first six months then collected fortnightly after that.

- This service is expected to cost \$460,229 more than Option 1 in the first year.
- All other costs associated with the purchase of containers, funding and service costs from Year 2 onwards is the same as Option 2.

**Option 3** – Do not seek WA Waste Authority Better Bins Plus funding and implement FOGO service with no other changes to the other containers except the frequency of collection of the household refuse container.

- Purchase and distribute new 240L FOGO containers.
- 240L household refuse container collected fortnightly.
- 240L recyclables container collected fortnightly.
- 240L FOGO containers collected weekly.
- One bulk hard waste and one bulk green waste collections each year.
- The cost of supply and delivery of new containers and other materials is estimated to cost \$434,534 which is made up of the following costs:
  - Supply of new 240L containers for FOGO at \$296,890.
  - Supply of kitchen caddies and caddie liners at an estimated total of \$56,000.
  - o Delivery at \$81,645.
- This service is expected to cost \$510,983 more than Option 1 in the first year.
- It is estimated that the new service arrangement will cost \$81,296\*\* more than the existing service from Year 2 onwards.

<u>Option 4</u> – Do not seek WA Waste Authority Better Bins Plus funding and implement FOGO service with no other changes to the other containers except the frequency of collection of the household refuse and recycling containers.

- Purchase and distribute new 240L FOGO containers.
- 240L household refuse container collected fortnightly.
- 240L recyclables container collected once every four weeks.
- 240L FOGO containers collected weekly.
- One bulk hard waste and one bulk green waste collections each year.
- The cost of supply and delivery of new containers and other materials is estimated to cost \$434,534 which is made up of the following costs:
  - Supply of new 240L containers for FOGO at \$296,890.
  - Supply of kitchen caddies and caddie liners at an estimated total of \$56,000.
  - Delivery at \$81,645.
- This service is expected to cost \$435,444 more than Option 1 in the first year.
- It is estimated that the new service arrangement will cost \$6,000 more than the existing service from Year 2 onwards.

The following table summarises the four options presented regarding the existing services and the introduction of FOGO.

			RESIDENT	AL WASTE SER	/ICE OPTION	
		1	2	2A***	3	4
No	o. of Services	5580	5580	5580	5580	5580
	Refuse	240L	140L	140L	240L	240L
Container Size	Recycling	240L	240L	240L	240L	240L
	FOGO	-	240L	240L	240L	240L
	Refuse	Weekly	Fortnightly	Weekly / Fortnightly	Fortnightly	Fortnightly
Frequency	Recycling	Fortnightl Y	Fortnightly	Fortnightly	Fortnightly	4-Weekly
	FOGO	-	Weekly	Weekly	Weekly	Weekly
Total Collection Cost		\$505,064	\$672,830	\$759,448	\$672,830	\$597,292
	Refuse	4,465	2,511	2,511	2,511	2,511
Annual Tonnage	Recycling	1,228	837	837	837	837
	FOGO	-	2,245	2,245	2,245	2,245
Total Disposal/Processing Cost		\$332,157	\$262,842	\$262,842	\$262,842	\$262,842
Total Container Cost		\$10,000	\$435,655	\$435,655	\$388,687	\$388,687
Bulk Waste Collections	Hard	1	1	1	1	1
per annum	Green	2	1	1	1	1
Bulk Waste Collection Cost		\$70,318	\$48,163	\$48,163	\$48,163	\$48,163
Kitchen containers, bags an	d materials	-	\$56,000	\$56,000	\$56,000	\$56,000
Better Bins F	Plus Funding	\$-	\$128,000	\$128,000	\$ -	\$ -
Total (	Cost - Year 1	\$917,539	\$1,347,150	\$1,377,768	\$1,428,522	\$1,352,983
Total Co	st - Ongoing	\$917,539	\$998,835	\$998,835	\$998,835	\$923,296

\* may vary subject to number of services that are available and eligible

\*\* Estimation based on current costs and are not indexed for future costs or adjusted for additional services.

\*\*\* The costs displayed for this option is for the first year only. Costs for Year 2 onwards the same as Option 2

#### Impact of a Possible Waste Levy

The State Government currently imposes a waste levy in the Perth Metropolitan Area on every tonne of waste that is disposed into landfill. It is possible that the waste levy may be imposed on regional areas, which would include the Shire of Dardanup.

The following table provides a comparison of the change in annual charge per service with and without a state waste levy.

		RESIDEN	TIAL WASTE SE	<b>RVICE OPTION</b>	
	1	2	2A	3	4
Without State Waste Levy					
Equivalent Change in Ongoing Service Charge	\$-	\$15	\$15	\$15	\$1
With State Waste Levy of \$70/tonne					
Equivalent Change in Ongoing Service Charge	\$56	\$46	\$46	\$46	\$33

Note: The above figures do not include the costs of bulk container purchase, caddie costs and other materials required to establish the three-container service.

#### **Discussion on Options**

The following discussion points are provided for each option:

#### Option 1

- This option is the status quo option which is a continuation of the current two container system.
- This option sees a significant amount of recoverable waste being sent to landfill.
- There is a high rate of contamination in the recyclables as currently experienced. Some of the contaminated recycles could be recovered through a FOGO service and diverted from landfill.
- This option does not meet best practice and will be able to achieve the targets set by the State Waste Strategy.
- This option is the most sensitive to any future waste levy because of the large portion of waste going into landfill.

#### Option 2

- This option involves the introduction of a third container for a FOGO service.
- The service arrangement of this option is eligible for Better Bins Plus Program funding of \$23 per service through the Waste Authority. This will cover approximately 29% of the cost of container and lid purchases required to roll out the three-container service.
- This arrangement is required by the Waste Authority and is considered best practice. The same service arrangement has been implemented successfully in other Councils within the Perth Metropolitan Area as well as the Bunbury-Geographe region.
- This service requires 140L household refuse containers to replace the existing 240L containers and for it to be collected fortnightly instead of weekly.
- It is expected that household refuse masses will reduce from 800kg per service per annum to 450kg per service per annum. A reduction of approximately 44%.
- Although the household refuse quantities will reduce, the change to fortnightly may initially prove to be difficult and could see impacts on the quality of the items collected through the recyclables and FOGO service.
- Ultimately, a 140L household refuse container is expected to encourage more frugal waste practices from households.
- The funding conditions are aimed at single dwelling lots and will require further consideration for multiple dwelling developments.

#### **Option 2A**

- This option is similar to Option 2, except it allows for a weekly collection of the 140L household refuse containers for the first six months, then the collection moves to fortnightly.
- The implementation of a weekly collection of the 140L household refuse containers for the first six months allows for an easier transition to the new container size.
- This service arrangement will costs slightly more than Option 2 in the first year only, directly attributable to the additional 13 collections.

#### Option 3

- This option involves the introduction of a third container for a FOGO service.
- This option allows the retention of 240L household refuse containers, although collected fortnightly instead of the current weekly collection.
- The service arrangement of this option is not eligible for Better Bins Plus Program funding.
- This arrangement is not considered as best practice by the Waste Authority.
- The use of 240L household refuse containers perhaps does not have the same impact in encouraging households to reduce household refuse generation as 140L containers.
- This option has a similar operational cost as Option 2 but has a greater net capital cost due to there being no funding being available.

#### Option 4

- This option is similar to Option 3, except that the recyclables service is reduced to a four weekly collection cycle.
- The reduction is recyclables collection frequency is based on the understanding that a FOGO service will draw cardboard from the recyclables stream. Further to this, the container deposit scheme is also anticipated to reduce the volume of recyclables as some residents will choose an alternative service to seek the deposit.
- The service arrangement of this option is not eligible for Better Bins Plus Program funding.
- This arrangement is not considered as best practice by the Waste Authority.
- Like Option 3, the use of 240L household refuse containers perhaps does not have the same impact in encouraging households to reduce household refuse generation as 140L containers.
- This option has a similar Year 1 cost as Option 2 but is operationally the cheapest of the threecontainer services options, with the operational costs only slightly more than the current twocontainer service.
- The change to a once in every four weeks collection of recyclables may be difficult for some households as their containers may be full before four weeks is achieved. Larger containers could be issued, either at the Shire's expense or for an added fee to those residents seeking a larger container. Alternatively, the collection could still be provided fortnightly and residents may be encouraged to not place their recyclables container for collection unless the container is more than half full.
- The change to a once in every four weeks collection of recyclables could result in a variation to increase contract rates.

#### **General Discussion**

- The Shire of Dardanup has a number of options for the purchase of the additional containers and other once-off purchase items.
  - The Shire could consider a once-off additional service charge required in the first year to pay for the new containers. Based on Option 2, the additional levy in the first year would be approximately \$53 per service for the supply and delivery of containers and lids and a further \$10 per service for other materials such as the caddies and liners.
  - The Shire could consider a loan for the purchase of the new containers with the loan being paid off over a period of 20 years or other period determined by the Council. The cost of servicing the loan could be either absorbed in the budget (i.e. offset by other savings) or covered by an increase in the annual waste service charge. To service a 20 year loan term would be the equivalent of an additional \$4 per service.
- The Shire has a number of options for the increase in operational costs resulting from a change to a three-container service.
  - The increase in annual costs could be absorbed in the budget (i.e. offset by other savings).
  - The increase in annual costs is covered by an increase in the annual waste service charge.

#### **Recommendations**

Based on the information provided in this Plan, the following is recommended in regard to the waste services provided by the Shire of Dardanup:

- 1. Option 2 be pursued by the Shire of Dardanup that is, the introduction of a three-container service including a FOGO service to commence as of 1 July 2021, subject to receiving the Waste Authority's Better Bins Plus funding.
- 2. The Shire of Dardanup make an application for funding under the Waste Authority's Better Bins Plus Program.
- 3. The Shire of Dardanup Council to further consider ways to fund the gap of introducing a three-container service, particularly for the purchase of new containers, lids and other items in the first year.
- 4. The Shire of Dardanup implement the strategies and timeframes as listed in this Plan.

#### 6. Monitoring and Review of this Plan

The waste industry and regulations are constantly evolving and can have a significant impact on the services and associated costs of the waste services provided by the Shire of Dardanup. Therefore, it is important that this Plan be reviewed periodically to ensure that it is still relevant and to monitor and assess the implementation of the strategies listed.

The Plan shall be reviewed annually and may be reviewed further based on the following triggers:

- Following the advertising of the Plan and consideration of public comments received.
- If the application for Better Bins Plus Program funding is unsuccessful.
- Any significant changes to the waste industry and environment (for example, the introduction of a State Waste Levy).

			RISI	<b>RISK ASSESSMENT TOOL</b>	ENT TOOL			
<b>OVERALL RISK EVENT:</b>		Shire of Dardanup Waste Management Plan and FOGO Service	e Managemen	t Plan and FOG	O Service			
<b>RISK THEME PROFILE:</b>	FILE:							
7 - Environment Management 13 - Project/Change Management	danagement ge Management			2 - Bı	2 - Business and Community Disruption			
<b>RISK ASSESSMENT CONTEXT:</b>	T CONTEXT: Operational	lar						
		PRIOR TO T	<b>PRIOR TO TREATMENT OR CONTROL</b>	CONTROL	BISK ACTION BLAN	AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	<b>LIKELIHOOD</b>	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	Collection services do meet health standards or expectations	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
FINANCIAL	Impact on budget and residents from the purchase of bins and other materials for the roll-out of FOGO	Major (4)	Almost Certain (5)	Extreme (20 - 25)	Subsidise cost with Better Bins Plus funding, and via savings in other areas of the budget or consider a loan to be paid over a 20 year period or similar	Minor (2)	Almost Certain (5)	Moderate (5 - 11)
IMPACT	Impact on budget and residents from the ongoing annual operation costs of a three-container service	Moderate (3)	Likely (4)	High (12 - 19)	Advise residents of the benefits of a FOGO service (value for money) and consider possible subsidisation through savings in other areas of the budget	Minor (2)	Almost Certain (5)	Moderate (5 - 11)
SERVICE INTERRUPTION	Change is collection frequency and container size for refuse collection service proves difficult for community	Moderate (3)	Possible (3)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	Council seen as not being progressive if avoidance and recovery is not improved	Major (4)	Possible (3)	High (12 - 19)	Adoption of Waste Management Plan and implementation of strategies in particular FOGO	Insignificant (1)	Unlikely (2)	Low (1 - 4)
ENVIRONMENT	Significant amount of material for Shire of Dardanup contributing to landfill	Moderate (3)	Almost Certain (5)	High (12 - 19)	Adoption of Waste Management Plan and implementation of strategies in particular FOGO to reduce waste going to landfill	Insignificant (1)	Almost Certain (5)	Moderate (5 - 11)

			RISI	<b>RISK ASSESSMENT TOOL</b>	ENT TOOL			
<b>OVERALL RISK EVENT:</b>		Annual Budget 2020/2021						
<b>RISK THEME PROFILE:</b>	)FILE:							
3 - Failure to Fulfi	3 - Failure to Fulfil Compliance Requirements (Statutory, Regulatory)	(Statutory, Regula	tory)					
RISK ASSESSMENT CONTEXT:	IT CONTEXT: Operational	nal						
CONSECLIENCE		PRIOR TO T	<b>PRIOR TO TREATMENT OR CONTROL</b>	CONTROL	BISK ACTION BLAN	AFTER TRE	AFTER TREATEMENT OR CONTROL	DNTROL
CATEGORY	RISK EVENT	CONSEQUENCE	<b>LIKELIHOOD</b>	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	The financial implications associated within the elements of the Annual Budget can affect the financial sustainability of Council.	Minor (2)	Possible (3)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not Required - No Risk Identified	N/A	N/A
LEGAL AND COMPLIANCE	Legislative requirements and compliance determine the need for the production of an Annual Budget	Minor (2)	Possible (3)	Moderate (5 - 11)	Not required.	Not Required - No Risk Identified	N/A	
REPUTATIONAL	The inclusion of projects and works within the various plans within the Annual Budget build community expectation.	Minor (2)	Possible (3)	Moderate (5 - 11)	Not required.	Not Required - No Risk Identified	N/A	N/A
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not Required - No Risk Identified	N/A	N/A

			RIS	<b>ISK ASSESSMENT TOOL</b>	ENT TOOL			
OVERALL RISK EVENT:		Failing to monitor the financial perform legislative requirement could result if a	ncial performan uld result if a qu	ance can increase qualified audit.	Failing to monitor the financial performance can increase the risk of a negative impact on the Shire's financial position. Non-compliance with legislative requirement could result if a qualified audit.	e's financial positio	on. Non-complia	nce with
<b>RISK THEME PROFILE:</b>								
3 - Failure to Fulfil	3 - Failure to Fulfil Compliance Requirements (Statutory, Regulatory)	(Statutory, Regula	atory)					
<b>RISK ASSESSMENT CONTEXT:</b>	T CONTEXT: Operational	nal						
CONSECUENCE		PRIOR TO T	PRIOR TO TREATMENT OR	OR CONTROL		AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	LIKELIHOOD	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	LIKELIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	Not monitoring ongoing financial performance would increase the risk of a negative impact on the financial position.	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	Non-compliance with the legislative requirements that results in a qualified audit.	Minor (2)	Unlikely (2)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	Non-compliance that results in a qualified audit can lead stakeholders to question the Council's ability to manage finances effectively.	Insignificant (1)	Unlikely (2)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.



#### Monthly Financial Report

For the Period

#### 1 July 2019 to 31 May 2020

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Monthly Financial Report For the Period Ended 31 May 2020

#### SUMMARY GRAPHS





Statement of Financial Activity by Program For the Period Ended 31 May 2020 (Covering 10 months or 92% of the year)

		2019/20	2019/20	2019/20	2019/20	Variance Y-T-D	Variance Y-T-D	2019/20	2018/19
	Sch			Y-T-D	Y-T-D	Actual to	Actual to		Last Year
		Adopted	Revised	Revised		Revised	Revised		
		Budget	Budget	Budget	Actual	Budget	Budget	Forecast	Actual
		\$	\$	\$	\$	\$	%	\$	\$
OPERATING ACTIVITIES									
Revenue									
Governance	4	1,550	3,240	2,937	8,720	5,783	196.9%	6,832	29
General Purpose Funding	3	15,474,534	15,461,160	15,420,649	15,496,032	75,383	0.5%	15,455,677	14,868,866
Law, Order, Public Safety	5	410,591	639,614	588,780	546,270	(42,510)	(7.2%)	648,404	440,114
Health	7	20,150	20,150	18,458	27,077	8,619	46.7%	15,650	19,177
Education and Welfare	8	3,500	4,205	3,850	7,205	3,355	87.1%	3,205	13,384
Community Amenities	10	1,504,690	1,516,067	1,501,732	1,487,158	(14,574)	(1.0%)	1,491,706	1,398,292
Recreation and Culture	11	2,834,702	2,825,214	2,554,124	2,297,941	(256,183)	(10.0%) 🔻	2,404,322	1,817,846
Transport	12	178,301	178,301	163,416	174,168	10,752	6.6%	177,801	161,057
Economic Services	13	101,580	101,580	93,060	87,517	(5,543)	(6.0%)	92,990	156,340
Other Property and Services	14	1,303,007	1,394,616	1,278,354	206,906	(1,071,448)	(83.8%) 🔻	1,445,490	226,367
Total Operating Revenue	-	21,832,605	22,144,147	21,625,360	20,338,993	(1,286,367)	(5.9%)	21,742,077	19,101,472
Operating Expenses									
Governance	4	(1,282,266)	(1,276,440)	(1,169,993)	(1,044,906)	125,087	10.7% 🔺	(1,242,444)	(1,026,392)
General Purpose Funding	3	(409,569)	(396,294)	(368,283)	(299,649)	68,634	18.6% 🔺	(380,294)	(354,842)
Law, Order, Public Safety	5	(1,661,176)	(1,890,341)	(1,732,610)	(1,455,832)	276,778	16.0% 🔺	(1,912,544)	(1,465,816)
Health	7	(564,913)	(563,407)	(515,198)	(478,258)	36,940	7.2%	(542,865)	(510,333)
Education and Welfare	8	(826,305)	(856,109)	(784,332)	(691,872)	92,460	11.8% 🔺	(810,226)	(754,676)
Community Amenities	10	(2,832,799)	(2,879,500)	(2,573,298)	(2,224,149)	349,149	13.6% 🔺	(2,721,049)	(2,106,048)
Recreation & Culture	11	(8,160,605)	(8,043,329)	(7,372,358)	(6,803,993)	568,365	7.7%	(7,844,738)	(7,299,459)
Transport	12	(5,802,313)	(5,807,747)	(5,320,689)	(5,307,124)	13,565	0.3%	(5,736,458)	(5,707,573)
Economic Services	13	(601,073)	(573,224)	(525,327)	(447,809)	77,518	14.8% 🔺	(563,420)	(523,658)
Other Property and Services	14	(263,823)	(327,314)	(299,695)	(66,466)	233,229	77.8%	(157,607)	(460,427)
Total Operating Expenditure	-	(22,404,841)	(22,613,705)	(20,661,783)	(18,820,059)	1,841,724	8.9%	(21,911,643)	(20,209,224)
Net Operating Activities		(572,236)	(469,558)	963,577	1,518,933	555,356	(57.6%)	(169,566)	(1,107,752)

(continued next page)



#### Statement of Financial Activity by Program For the Period Ended 31 May 2020 (Covering 10 months or 92% of the year)

		2019/20 Adopted	2019/20 Revised	2019/20 Y-T-D Revised	2019/20 Y-T-D	Variance Y-T-D Actual to Revised	/ariance Y-T-D Actual to Revised	2019/20	2018/19 Last Year
		Budget \$	Budget \$	Budget \$	Actual \$	Budget \$	Budget %	Forecast \$	Actual \$
Net Operating Activities (from previous page)		(572,236)	(469,558)	963,577	1,518,933	555,356	57.6%	(169,566)	(1,107,752)
ADJUSTMENTS OF NON CASH ITEMS									
(Profit)/Loss on Asset Disposals		(1,165,000)	(1,146,655)	(1,051,105)	49,517	1,100,622	104.7%	(1,221,645)	18,870
Accruals		0 0	34,140 0	0 0	0	0	0.0% 0.0%	34,140 0	(202,576) (70,068)
Fair Value Adjustment to Financial Assets Contra Repayment of Prefunded Infrastructure		0	0	0	0		0.0%	0	(70,068) 0
Depreciation on Assets		5,242,750	5,242,750	4,805,801	4,680,468		(2.6%)	5,210,500	5,042,270
Adjusted Net Operating Activities	A	3,505,514	3,660,677	4,718,273	6,248,918	1,530,645	32.4%	3,853,429	3,680,744
<b>Revenue</b> Non-operating grants, subsidies & contributions		3,804,088	4,361,257	3,997,752	1,714,181	(2,283,571)	(57.1%) 🔻	4,126,841	1,874,654
Proceeds from Disposal of Assets		1,323,924	4,301,237 1,341,054	1,229,283	1,293,721	(2,283,571) 64,438	5.2%	1,341,054	261,575
Total Capital Revenue	-	5,128,012	5,702,311	5,227,035	3,007,902		(42.5%)	5,467,895	2,136,229
Expenditure									
Land & Buildings		(1,148,280)	(1,231,423)	(1,130,969)	(137,298)	993,671	87.9% 🔺	(921,404)	(400,830)
Infrastructure Assets - Road / Bridges / Paths		(5,405,567)	(5,149,126)	(4,719,594)	(2,713,291)	2,006,303	42.5% 🔺	(5,149,127)	(3,788,051)
Infrastructure Assets - Parks & Gardens		(854,154)	(833,737)	(764,203)	(387,253)	376,950	49.3% 🔺	(833,737)	(68,198)
Vehicles		(546,108)	(631,444)	(578,798)	(283,499)	295,300	51.0% 🔺	(631,444)	(381,650)
Plant & Equipment		(26,000)	(6,000)	(5,500)	0	-,	100.0%	(6,000)	(45,444)
Furniture & Fittings	_	(475,478)	(456,719)	(418,627)	(763)	417,864	99.8%	(426,419)	(33,131)
Total Capital Expenditure		(8,455,587)	(8,308,449)	(7,617,691)	(3,522,104)	4,095,587	53.8%	(7,968,131)	(4,717,304)
Net Capital Activities	В	(3,327,575)	(2,606,138)	(2,390,656)	(514,202)	1,876,454	78.5%	(2,500,236)	(2,581,075)
FINANCING ACTIVITIES									
Revenue									
Proceeds from New Loans		750,000	750,000	687,500	0	()	(100.0%) 🔻	0	0
Self Supporting Loans - Principal Recoups		0	0	0	0		0.0%	0	32,936
Transfers from Reserves	-	6,036,256	5,408,863	4,956,914	838,176		(83.1%)	5,227,650	3,969,700
Total Financing Revenue		6,786,256	6,158,863	5,644,414	838,176	(4,806,238)	85.2%	5,227,650	4,002,636
Expenditure									
Repayment of Loans		(279,748)	(279,748)	(279,747)	(279,748)	(2)	(0.0%)	(279,748)	(362,288)
Transfers to Reserves	_	(6,853,402)	(7,032,931)	(6,446,660)	(460,815)	5,985,845	92.9%	(6,323,794)	(4,638,721)
Total Financing Expenditure		(7,133,150)	(7,312,679)	(6,726,407)	(740,563)	5,985,844	89.0%	(6,603,542)	(5,001,009)
Net Financing Activities	с	(346,894)	(1,153,817)	(1,081,993)	97,613	1,179,606	109.0%	(1,375,893)	(998,373)
FUNDING SOURCES									
Surplus/(Deficit) July 1 B/Fwd	D	301,183	404,751	404,751	404,751	0	0.0%	404,751	303,456
CLOSING FUNDS (A+B+C+D)	_	132,227	305,473	1,650,375	6,237,080	4,586,705	(277.9%)	382,052	404,751

**KEY INFORMATION** 

Indicates a significant variance between Year-to-Date (YTD) Revised Budget and YTD Actual data as per the adopted materiality threshold.

▲ indicates a positive impact on the surplus/deficit position. ▼ indicates a negative impact on the surplus/deficit position.

Refer to Note 2 for an explanation of the reasons for the variance.

This statement to be read in conjunction with the accompanying Financial Statements and Notes



Statement of Financial Activity by Program For the Period Ended 31 May 2020 NET CURRENT ASSETS

Note	Year to Date Actual 31-May-2020 \$	This Time Last Year 31-May-2019 \$	Last Year Closing 30 June 2019 \$
Represented By:	<b>,</b>	3	2
CURRENT ASSETS			
Cash and Cash Equivalents	24,198,014	18,594,209	19,441,957
Rates Debtors Outstanding	578,578	467,585	311,495
Pensioner Rates Rebate	18,594	6,527	19,786
Sundry Debtors	198,239	58,259	200,555
Self Supporting Loan Asset	0	32,936	, (
Accrued Revenue	60,770	110,516	151,597
Prepaid Expenses	0	0	22,734
Goods & Services Tax / BAS Refund	100,545	97,611	127,208
Other Receivables	(175,407)	0	(
Inventories - Materials	5,047	2,166	5,047
Inventories- Trading Stock - Recreation Centre	8,430	11,857	8,430
Current Assets	24,992,809	19,381,666	20,288,810
LESS CURRENT LIABILITIES			
Payables:			
Sundry Creditors	(385)	(592)	(735,312
Other Payables	(67,523)	(77,599)	(5,069
Municipal Bonded Liabilities	(782,970)	0	(825,867
Prepaid Revenue - Rates / PPL	(559,989)	(464,728)	(565,248
Accrued Interest on Debentures	(37,523)	(42,740)	(37,523
Accrued Salaries & Wages	0	0	(25,165
Other Accrued Expenses	0	0	(5,174
Borrowings - Debentures	0	0	(279,748
Provisions:			
Staff Leave Provisions	(1,272,697)	(1,190,807)	(1,272,697
Current Liabilities	(2,721,086)	(1,776,466)	(3,751,803
Net Current Assets	22,271,723	17,605,200	16,537,007
Less: Restricted Assets / Reserve Funds 4	(16,034,643)	(14,377,437)	(16,412,005
Less: Self Supporting Loan Income	0	(32,936)	(
Add: Current - Borrowings	0	0	279,748
CLOSING FUNDS / NET CURRENT ASSETS (per previous page)	6,237,079	3,194,827	404,751





Statement of Comprehensive Income by Nature or Type For the Period Ended 31 May 2020 (Covering 10 months or 92% of the year)

	2019/20	2019/20	2019/20 Y-T-D	2019/20 Y-T-D	Variance Y-T-D V Actual to	Actual to	2019/20	2018/19 Last Year
	Adopted	Revised	Revised		Revised	Revised	<b>-</b> .	
	Budget	Budget	Budget	Actual	Budget	Budget	Forecast	Actual
	\$	\$	\$	\$	\$	%	\$	\$
Revenue								
Rates	13,742,181	13,713,132	13,706,056	13,716,973	10,917	(0.1%)	13,713,132	13,091,847
Grants, Subsidies & Contributions	3,234,207	2,580,226	2,429,418	3,423,896	994,478	(40.9%)	3,564,954	2,202,843
Fees and Charges	3,156,021	3,150,593	3,001,610	2,692,635	(308,975)	10.3%	2,663,467	3,112,535
Interest Earnings	507,656	507,656	478,455	485,871	7,416	(1.5%)	532,994	581,228
Other Revenue	27,540	27,540	25,245	19,618	(5,628)	0.0%	27,540	27,855
	20,667,605	19,979,147	19,640,784	20,338,993	698,209	(3.6%)	20,502,087	19,016,308
Expenses								
Employee Costs	(11,155,410)	(11,016,815)	(10,092,622)	(9,482,914)	609,708	6.0%	(10,911,998)	(9,793,985)
Materials and Contracts	(4,665,758)	(4,950,406)	(4,474,931)	(3,442,873)	1,032,058	23.1%	(4,402,192)	(4,049,538)
Utility Charges	(561,970)	(565,816)	(518,353)	(480,290)	38,063	7.3%	(552,718)	(551,434)
Depreciation on Non-current Assets	(5,242,750)	(5,242,750)	(4,805,801)	(4,680,468)	125,333	2.6%	(5,210,500)	(5,042,270)
Interest Expense	(113,943)	(113,943)	(105,493)	(106,819)	(1,326)	(1.3%)	(113,943)	(127,293)
Insurance	(282,982)	(314,956)	(288,442)	(316,060)	(27,618)	(9.6%)	(313,993)	(253,207)
Other	(382,028)	(390,674)	(359,339)	(261,119)	98,220	27.3%	(387,954)	(357,532)
	(22,404,842)	(22,595,361)	(20,644,981)	(18,770,542)	1,874,439	9.1%	(21,893,298)	(20,175,259)
Operational Surplus / (Deficit)	(1,737,237)	(2,616,214)	(1,004,197)	1,568,451	2,572,648	256.2%	(1,391,211)	(1,158,951)
Grants & Contributions for the Development of								
Assets	3,804,089	4,361,257	3,997,752	1,714,181	(2,283,571)	(57.1%)	4,126,841	1,874,654
Profit on Asset Disposals	1,165,000	1,146,655	1,051,105	0	(1,051,105)	(100.0%)	1,221,645	15,093
Loss on Asset Disposals	0	0	0	(49,517)	(49,517)	(100.0%)	0	(33,963)
Fair Value Adjustment to Financial Assets	0	0	0	0	0	0.0%	0	70,068
	4,969,089	5,507,912	5,048,857	1,664,663	(3,384,194)	67.0%	5,348,486	1,925,852
NET RESULT	3,231,852	2,891,699	4,044,660	3,233,114	(811,546)	20.1%	3,957,275	766,901
Other Comprehensive Income								
Changes on Revaluation of Non-Current Assets	0	0	0	0	0	0.0%	0	0
TOTAL COMPREHENSIVE INCOME	3,231,852	2,891,699	4,044,660	3,233,114	(811,546)	20.1%	3,957,275	766,901



Notes to the Statement of Financial Activity

#### For the Period Ended 31 May 2020

#### 1. PROGRAMS / ACTIVITIES

In order to discharge its responsibilities to the community, the Shire has developed a set of operational and financial objectives. These objectives have been established both on an overall basis, reflected by the Shire's Community Vision and for each of its broad activities/programs.

#### COMMUNITY VISION

Provide effective leadership in encouraging balanced growth and development of the Shire while recognising the diverse needs of the community.

PROGRAM NAME	OBJECTIVE	ACTIVITIES
GENERAL PURPOSE FUNDING	To collect revenue to allow for the provision of services	Rates, general purpose government grants and interest revenue.
GOVERNANCE	To provide a decision making process for the efficient allocation of scarce resources.	Includes the activities of members of Council and the administration support available to Council for the provision of governance of the District. Other costs relate to the task of assisting elected members and ratepayers on matters which do not concern specific Council services.
LAW, ORDER, PUBLIC SAFETY	To provide services to help ensure a safer and environmentally conscious community.	Supervision and enforcement of various local-laws relating to the fire prevention, animal control and protection of the environment, and other aspects of public safety including emergency services.
HEALTH	To provide services to achieve community and environmental health.	Maternal and infant health facilities, immunisation, meat inspection services, inspection of food outlets, noise control and pest control services.
EDUCATION AND WELFARE	To provide services to children, youth, the elderly and disadvantaged persons.	Pre-school and other education services, child minding facilities, playgroups, senior citizens' centres.
COMMUNITY AMENITIES	To provide services required by the community.	Rubbish collection services, operation of refuse site, litter control, construction and maintenance of urban storm water drains, protection of the environment and administration of town planning schemes, cemeteries and public conveniences.
RECREATION AND CULTURE	To establish and effectively manage infrastructure and resources which help the social well being of the community.	Maintenance of halls, civic buildings, river banks, recreation centre and various sporting facilities. Provision and maintenance of parks, gardens and playgrounds. Operation of library and other cultural facilities.
TRANSPORT	To promote safe, effective and efficient transport services to the community.	Construction and maintenance of streets, roads, bridges, footpaths, cycle ways, parking facilities, traffic control and depot. Cleaning of streets and maintenance of street trees, street lighting, etc.
ECONOMIC SERVICES	To help promote the shire and its economic wellbeing.	Tourism and area promotion, building control, provision of rural services including weed control and vermin control, standpipes.
OTHER PROPERTY & SERVICES	To monitor and control Council's overheads operating accounts.	Private works operations, plant repairs and operations costs, engineering operation costs.

Activity 020		/ nt		Lower receipt of capital grants & contributions to date for bush fire buildings, halls & sporting	הנוזבולי ומו באומוב המסגר ומווולא לא מי מי מראש המסגר אי גובע או מעניין אין אין אין אין אין אין אין אין אין	Major building projects Eaton Bowling Club, Waterloo Fire Station, Eaton Oval Clubrooms upgrade	1886,000 from delay in upgrade project Eaton Drive roundabout, \$324,000 in ongoing other road upgrades, \$550,000 relates to pending road renewals, \$435,000 for various paths upgrades not yet	constructed. Work is ongoing for several parks and reserves projects with some works yet to occur including Foreshore is not a rawn unreade and Gommeeville Macter Plan immenuements	rotestione doet and publicate and ontoniestine master right inprovements. Procurement for replacement tip truck and several Works Operations utilities to occur in 2020/21.	All furniture and equipment purchases not yet completed including Rec Centre gym equipment		Wanju Developer Contribution Ioan to be borrowed next year Transfers from Reserves to occur at completion of relevant projects or at year-end.	Most transfers to Reserves will occur at year-end.		
of Financia d 31 May 2		Timing / Permanent		▼ Timing		Timing	Timing	Timing	Timing	Timing		<ul><li>Timing</li><li>Timing</li></ul>	Timing		
Notes to the Statement of Financial Activity For the Period Ended 31 May 2020	ontinued)	Variance to Y-T-D Revised Budget %	32.4%	(57.1%)	5.2% (42.5%)	87.9%	42.5%	49.3%	51.0% 100.0%	99.8% (53.8%)	(78.5%)	(100.0%) 0.0% (83.1%) (85.2%)	(0.0%) 92.9% <b>(89.0%)</b>	(109.0%)	0.0% <b>277.9%</b>
Notes to For	BY PROGRAM (cc	Variance to Variance to Y-T-D Y-T-D Revised Budget Revised Budget \$ %	1,530,645	(2,283,571)	64,438 (2,219,133)	993,671	2,006,303	376,950	295,300 5,500	417,864 <b>4,095,587</b>	1,876,454	(687,500) 0 (4,118,738) (4,806,238)	(2) 5,985,845 <b>5,985,844</b>	1,179,606	0 <b>4,586,705</b>
	CIAL ACTIVITY	2019/20 Y-T-D Actual \$	6,248,918	1,714,181	1,293,721 3,007,902	(137,298)	(2,713,291)	(387,253)	(283,499) 0	(763) ( <b>3,522,104</b> )	(514,202)	0 0 838,176 838,176	(279,748) (460,815) <b>(740,563)</b>	97,613	404,751 <b>6,237,080</b>
	EMENT OF FINAN	2019/20 Y-T-D Revised Budget	4,718,273	3,997,752	1,229,283 <b>5,227,035</b>	(1,130,969)	(4,719,594)	(764,203)	(578,798) (5,500)	(418,627) (7,617,691)	(2,390,656)	687,500 687,500 4, <u>956,914</u> <b>5,644,414</b>	(279,747) (6,446,660) (6,726,407)	(1,081,993)	404,751 <b>1,650,375</b>
	2. EXPLANATION OF MATERIAL VARIANCES IN THE STATEMENT OF FINANCIAL ACTIVITY BY PROGRAM (continued)	Ľ	Adjusted Net Operating Activities (from previous pa	INVESTING ACTIVITIES Revenue Non-operating grants, subsidies & contributions	Proceeds from Disposal of Assets Total Capital Revenue	Expenditure Land & Buildings	Infrastructure Assets - Road / Bridges / Paths	Infrastructure Assets - Parks & Gardens	Vehicles Plant & Equipment	Furniture & Fittings Total Capital Expenditure	Net Capital Activities	FINANCING ACTIVITIES Revenue Proceeds from New Loans Self Supporting Loans - Principal Reimbursement Transfers from Reserves Total Financing Revenue	Expenditure Repayment of Loans Transfers to Reserves Total Financing Expenditure	Net Financing Activities	FUNDING SOURCES Surplus/(Deficit) July 1 B/Fwd CLOSING FUNDS (A+B+C+D)

Shire of Dardanup

# (Appendix ORD: 12.14B)

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Notes to the Statement of Financial Activity

For the Period Ended 31 May 2020

#### 3. TRUST FUNDS

Funds held at reporting date over which the Shire has no control and which are not included in the financial statements are as follows:

NAME	BALANCE 1 JULY	RECEIPTS	INTEREST	PAYMENTS	ADJUSTMENTS (TRANSFERS)	CLOSING BALANCE
	\$	\$	\$	\$	\$	\$
Tourism WA for Ferguson Valley Project	301,800.73	0.00	0.00	75,000.00	0.00	226,800.73
Public Open Space	857,943.74	16,500.00	0.00	0.00	0.00	874,443.74
Accrued Interest	0.00	0.00	4,733.67	0.00	0.00	4,733.67
Plus: Outstanding Creditors	0.00	0.00	0.00	0.00	0.00	0.00
Less: Outstanding Debtors	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	1,159,744.47	16,500.00	4,733.67	75,000.00	0.00	1,105,978.14

#### 4. CASH BACKED RESERVES

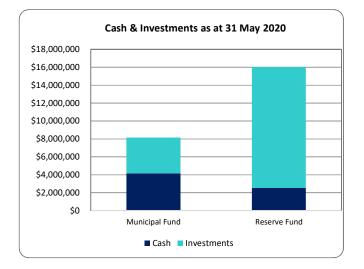
NAME	BALANCE 1 JULY	RECEIPTS	INTEREST	PAYMENTS	ADJUSTMENTS (TRANSFERS)	CLOSING BALANCE
	\$	\$	\$	\$	\$	\$
Un-Restricted						
Executive & Compliance Vehicles Reserve	364,152.78	0.00	0.00	0.00	0.00	364,152.78
Plant & Engineering Equipment Reserve	837,737.92	0.00	0.00	0.00	0.00	837,737.92
Eaton Recreation Centre - Equipment Reserve	365,346.45	0.00	0.00	0.00	0.00	365,346.45
Building Maintenance Reserve	1,620,574.64	0.00	0.00	0.00	0.00	1,620,574.64
Employee Relief Reserve	226,994.98	0.00	0.00	0.00	0.00	226,994.98
Employee Leave Entitlements Reserve	5,000.00	0.00	0.00	0.00	0.00	5,000.00
Refuse Site Environmental Works Reserve	82,960.37	0.00	0.00	0.00	0.00	82,960.37
Information Technology Reserve	406,982.52	0.00	0.00	0.00	0.00	406,982.52
Roadwork Construction & Major Maintenance Reserve	500,300.53	0.00	0.00	0.00	0.00	500,300.53
Meat Inspection Reserve	5,218.96	0.00	0.00	5,218.96	0.00	0.00
Accrued Salaries Reserve	379,359.78	0.00	0.00	0.00	0.00	379,359.78
Tourism Reserve	6,377.35	5,218.96	0.00	0.00	0.00	11,596.31
Recycling Education Reserve	82,334.11	0.00	0.00	0.00	0.00	82,334.11
Road Safety Programs Reserve	8,356.69	18,200.00	0.00	0.00	0.00	26,556.69
Council Land Development Reserve	20,838.59	0.00	0.00	0.00	0.00	20,838.59
Carried Forward Projects Reserve	2,968,519.73	0.00	0.00	0.00	0.00	2,968,519.73
Election Expenses Reserve	23,487.06	0.00	0.00	0.00	0.00	23,487.06
Town Planning Consultancy Reserve	91,740.47	0.00	0.00	0.00	0.00	91,740.47
Parks & Reserves Upgrades Reserve	549,702.69	0.00	0.00	0.00	0.00	549,702.69
Strategic Planning Studies Reserve	218,946.93	0.00	0.00	0.00	0.00	218,946.93
Pathways Reserve	164,161.78	0.00	0.00	0.00	0.00	164,161.78
Asset / Rates Revaluation Reserve	292,877.18	0.00	0.00	0.00	0.00	292,877.18
Refuse & Recycling Bin Replacement Reserve	54,075.81	0.00	0.00	0.00	0.00	54,075.81
Sale of Land Reserve	2,303,942.18	0.00	0.00	0.00	0.00	2,303,942.18
Emergency Services Reserve	10,306.48	0.00	0.00	10,306.48	0.00	0.00
Small Plant & Equipment Reserve	15,261.45	0.00	0.00	15,261.45	0.00	0.00
Storm Water Reserve	101,082.19	15,261.45	0.00	0.00	0.00	116,343.64
	11,706,639.62	38,680.41	0.00	30,786.89	0.00	11,714,533.14
Restricted						
Contribution to Works Reserve	601,543.28	62,768.69	0.00	0.00	0.00	664,311.97
Eaton Drive - Access Construction Reserve	153,212.42	0.00	0.00	0.00	0.00	153,212.42
Eaton Drive - Scheme Construction Reserve	904,633.29	0.00	0.00	0.00	0.00	904,633.29
Fire Control Reserve	1,108.89	10,306.48	0.00	0.00	0.00	11,415.37
Collie River (Eaton Drive) Bridge Construction Reserve	1,548,013.31	0.00	0.00	0.00	0.00	1,548,013.31
Unspent Grants Reserve	1,308,820.17	0.00	0.00	766,611.75	0.00	542,208.42
Swimming Pool Inspection Reserve	0.00	0.00	0.00	0.00	0.00	0.00
Unspent Specified Area Rate - Bulk Waste Collection Reserve	79,770.43	0.00	0.00	0.00	0.00	79,770.43
Unspent Specified Area Rate - Eaton Landscaping Reserve	67,486.00	0.00	0.00	0.00	0.00	67,486.00
Wanju Developer Contribution Plan Unspent Loan Reserve	0.00	0.00	0.00	0.00	0.00	0.00
Dardanup Developer Contribution Scheme - Dardanup Community Centre Reserve	7,317.22	0.00	0.00	7,317.22	0.00	0.00
Dardanup Developer Contribution Scheme - Community Centre Design Reserve	1,126.10	0.00	0.00	1,126.10	0.00	0.00
Dardanup Developer Contribution Scheme - Dardanup Public Library Reserve	4,356.65	0.00	0.00	4,356.65	0.00	0.00
Dardanup Developer Contribution Scheme - Wells Park Hard Courts Reserve	4,089.36	0.00	0.00	4,089.36	0.00	0.00
Dardanup Developer Contribution Scheme - Wells Park Clubroom Reserve	9,725.94	0.00	0.00	9,725.94	0.00	0.00
Dardanup Developer Contribution Scheme - Wells Park Clubrooms Design Reserve	1,282.14	0.00	0.00	1,282.14	0.00	0.00
Dardanup Developer Contribution Scheme - Wells Park Car Park Reserve	12,880.03	0.00	0.00	12,880.03	0.00	0.00
Dardanup Expansion Developer Contribution Plan Reserve	0.00	40,777.44	0.00	0.00	0.00	40,777.44
	4,705,365.23	113,852.61	0.00	807,389.19	0.00	4,011,828.65
Interest	0.00	0.00	308,581.58	0.00	0.00	308,581.58
Less: Outstanding Debtors	0.00	(300.00)	0.00	0.00	0.00	(300.00)
TOTAL	16,412,004.85	152,233.02	308,581.58	838,176.08	0.00	16,034,643.37

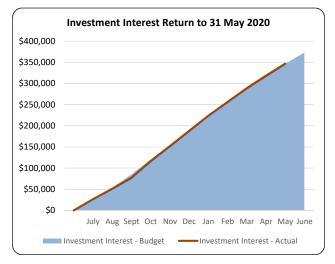


Notes to the Statement of Financial Activity For the Period Ended 31 May 2020

#### 5. STATEMENT OF INVESTMENTS

BANK	ТҮРЕ		AMOUNT	RATE	DAYS	COMMENCEMENT	MATURITY	ESTIMATED INTEREST	INTEREST CREDITED
DAIN			Allociti		DAIS	COMMENCEMENT		INTEREST	2019-2020
MUNICIPAL FUND	<u>)</u>								
CBA	Municipal Fund Bank Account	\$	4,159,510.00	0.40%				\$1,386.50	\$5,666.72
NAB	Term Deposit	\$	1,000,000.00	1.05%	78	4/2020	6/2020	\$2,252.79	\$3,989.25
NAB	Term Deposit	\$	1,000,000.00	0.67%	61	4/2020	6/2020	\$1,124.19	\$3,990.25
Macquarie	Term Deposit	\$	1,000,000.00	1.65%	91	4/2020	6/2020	\$4,130.11	\$3,989.04
Macquarie	Term Deposit	\$	1,000,000.00	1.70%	94	3/2020	6/2020	\$4,378.08	\$0.00
		\$	8,159,510.00					\$13,271.67	\$17,635.26
TRUST FUND									
								40.00	40.407.40
CBA	Trust Fund Bank Account	<u>&gt;</u>	1,105,978.14					\$0.00	\$2,467.49
		<u>&gt;</u>	1,105,978.14				:	\$0.00	\$2,467.49
<b>RESERVE FUND</b>									
CBA	Reserve Bank Acccount	\$	2,534,643.37					\$0.00	\$6,838.69
Westpac	Coupon Select Deposit (Tailored Deposit)	\$	5,000,000.00	2.94%	1098	8/2017	8/2020	\$455,244.76	\$147,402.73
Members Equity	Term Deposit	\$	1,100,000.00	1.65%	274	9/2019	6/2020	\$13,990.28	\$29,496.49
AMP	Term Deposit	\$	1,900,000.00	1.80%	189	1/2020	8/2020	\$17,709.04	\$33,271.23
NAB	Term Deposit	\$	1,500,000.00	1.55%	180	2/2020	10/2020	\$11,465.75	\$0.00
NAB	Term Deposit	\$	1,000,000.00	1.10%	83	4/2020	6/2020	\$2,501.37	\$3,989.25
NAB	Term Deposit	\$	1,000,000.00	1.62%	270	9/2019	6/2020	\$11,983.56	\$0.00
Macquarie	Term Deposit	\$	1,000,000.00	1.70%	94	3/2020	6/2020	\$4,378.08	\$0.00
Macquarie	Term Deposit	\$	1,000,000.00	1.70%	89	3/2020	6/2020	\$4,145.21	\$0.00
		\$	16,034,643.37					\$521,418.06	\$220,998.39
	Total Interest Received							_	\$241,101.14







Notes to the Statement of Financial Activity For the Period Ended 31 May 2020

#### 5. STATEMENT OF INVESTMENTS (continued)

#### Total Funds Invested

Total Funds Invested as at Reporting Date -

Muncipal Fund Investment Portfolio	\$ 4,000,000.00
Trust Fund Investment Portfolio	\$ -
Reserve Fund Investment Portfolio	\$ 13,500,000.00
	\$ 17,500,000.00

#### Investment Policy - Portfolio Risk Exposure

Council's investment policy provides a framework to manage the risks associated with financial investments.

#### Portfolio - Terms of Maturity

Limits are placed on the term to maturity thereby reducing the impact of any significant change in interest rate markets and to provide liquidity.

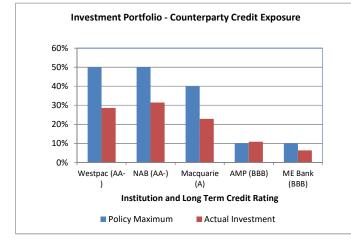
#### Counterparty Credit Exposure

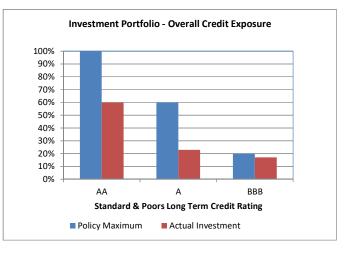
Exposure to an individual authorised deposit-taking institution (ADI) counterparty will be restricted by their credit rating so that single entity exposure is limited.

#### Overall Credit Exposure

To control the credit quality on the entire portfolio, limits are placed on the percentage exposed to any particular credit rating category.

The following charts demonstrate the current portfolio diversity and risk compliance with the policy framework.





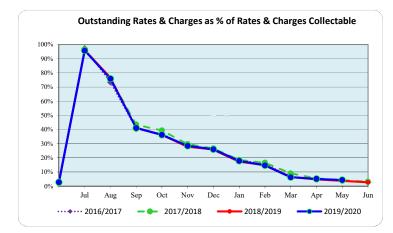


#### Notes to the Statement of Financial Activity For the Period Ended 31 May 2020

6. Accounts Receivable as at 31 May 2020

#### **Rates and Charges Outstanding**

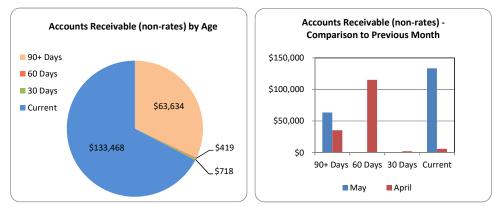
2019/20 annual rates were raised on 17 July 2019 and were due for payment by 12 September 2019. As at the reporting date, total outstanding rates and charges (including pensioner deferred rates) is \$690,481. This equates to 4.24% of rates and charges collectable and is at a similar ratio to recent years. It is the objective of management to achieve less than 4% of rates and charges outstanding by 30 June.



#### Sundry Debtors Outstanding (non-rates)

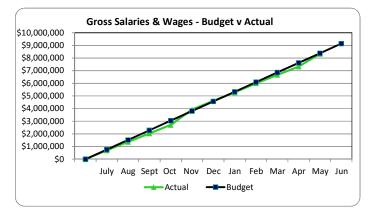
As at the reporting date, the total outstanding Sundry Debtors amount to \$198,238.

The significant invoice raised in May was \$132,000 for Main Roads WA - Regional Road Group project grant funding. It is anticipated this invoice will be paid in June.



#### 7. Salaries and Wages to 31 May 2020

At the reporting date, total salaries and wages expenditure is \$8,330,026 (91.08%) of the revised annual budget of \$9,145,748 for the 2019/20 financial year).



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# Notes to the Statement of Financial Activity For the Period Ended 31 May 2020

# 8 RATING INFORMATION

		Number of	Rateable	2019/20 Revised Budget rate	2019/20 Revised Budget interim	2019/20 2019/20 Revised Budget Revised Budget back total	2019/20 Revised Budget total	2019/20 Actual total	2018/19 Actual total	2018/19 Budget total
RATE TYPE	Rate in	properties	value	revenue	rates	rates	revenue	revenue	revenue	revenue
	Ŷ		Ŷ	ዯ	ዯ	ዯ	Ŷ		Ŷ	Ŷ
Differential general rate or general rate Gross rental valuations										
General Rates - GRV: Residential	0.100662	3.085	55.836.980	5.620.662	C	0	5.620.662	5.620.662	5.309.324	5.309.324
General Rates - GRV: Commercial	0.100662	54	13,605,420	1,369,549	0	0	1,369,549	1,369,549	1,315,359	1,315,359
General Rates - GRV: Industrial	0.100662	65	7,529,898	757,975	0	0	757,975	757,975	727,562	727,562
General Rates - GRV: Small Holding	0.100662	360	8,010,860	806,389	0	0	806,389	806,389	761,329	761,329
General Rates - GRV: Interim and Back Rates	0.100662	0	0	0	75,000	0	75,000	91,938	85,991	230,000
Unimproved valuations										
General Rates - UV: Broad Acre Rural	0.006259	488	273,051,000	1,709,026	0	0	1,709,026	1,709,026	1,644,349	1,644,349
General Rates - UV: Mining	0.006259	0	0	0	0	0	0	0	0	0
General Rates - UV: Interim and Back Rates	0.006259	0	0	0	0	0	0	0	0	0
Sub-Totals		4,052	358,034,158	10,263,601	75,000	0	10,338,601	10,355,539	9,843,914	9,987,923
	Minimum									
Minimum payment Gross rental valuations	Ŷ									
General Rates - GRV: Residential	1.547.50	1.662	21.419.776	2.571.945	C	C	2.571.945	2.571.945	2.484.960	2,484,960
General Rates - GRV: Commercial	1,547.50	L	61,400	10,833	0	0	10,833	10,833	10,416	10,416
General Rates - GRV: Industrial	1,547.50	52	629,150	80,470	0	0	80,470	80,470	77,376	77,376
General Rates - GRV: Small Holding	1,547.50	72	607,980	111,420	0	0	111,420	111,420	104,160	104,160
General Rates - GRV: Interim and Back Rates	1,547.50	0	0	0	0	0	0	0	0	0
Unimproved valuations										
General Rates - UV: Broad Acre Rural	1,547.50	135	20,540,600	208,913	0	0	208,913	208,913	191,952	191,952
General Rates - UV: Mining	1,547.50	20	372,699	30,950	0	0	30,950	30,950	29,759	29,759
General Rates - UV: Interim and Back Rates	1,547.50	0	0	0	0	0	0	0	0	0
Sub-Totals		1,948	43,631,605	3,014,531	0	0	3,014,531	3,014,531	2,898,623	2,898,623
		6,000	6,000 401,665,763	13,278,132	75,000	0	13,353,132	13,370,070	12,742,537	12,886,546
Discounts/concessions						•	(5,000)	(748)	(19,775)	(5,000)
Total amount raised from general rates							13,348,132	13,369,322	12,722,762	12,881,546
Specified area rates							350,000	347,651	351,801	349,178
l otal rates							13,698,132	13,/16,9/3	13,U/4,5b3	13,230,724

# (Appendix ORD: 12.14B)

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Shire of Dardanup Notes to the Statement of Financial Activity For the Period Ended 31 May 2020

# 9. INFORMATION ON BORROWINGS

Debenture Repayments

		Principal Opening Balance 01 July 2019	New Loans 2019/20	w ns /20	Principal Repayments 2019/20	pal nents /20	Interest Repayments 2019/20	est nents /20	Principal Outstanding 30 June 2020	pal Iding 2020
Particulars	Loan No.	ŝ	Actual \$	Revised Budget \$	Actual \$	Revised Budget \$	Actual \$	Revised Budget \$	Actual \$	Revised Budget \$
<b>Community Amenities</b> Wanju/Waterloo Industrial Park Developer Contribution Plans	New	0	0	750,000	0	0	0	0	0	750,000
Recreation and Culture Eaton Recreation Centre Eaton Recreation Centre Extensions Fitness Equipment Glen Huon Oval Club Rooms	59 63 69	363,773 21,440 21,070 1,005,108	0000	0000	83,083 21,440 21,070 39,638	83,083 21,440 21,070 39,638	21,366 1,084 413 41,700	22,423 1,146 413 45,072	280,690 (0) 965,470	280,690 (0) (0) 965,470
<b>Transport</b> Depot Land	66	559,417	0	0	56,313	56,313	24,073	25,841	503,104	503,104
<b>Economic Services</b> Gravel Pit Land - Panizza Road	61	113,015	0	0	22,466	22,466	7,039	7,381	90,550	90,550
<b>Other Property and Services</b> Administration Building Extensions	65	159,042 2,242,865	0 0	0 750,000	35,739 279,748	35,739 279,748	11,145 106,819	11,667 113,943	123,303 1,963,117	123,303 2,713,117

All debenture repayments were financed by general purpose revenue.

(Appendix ORD: 12.14B)

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# Notes to the Statement of Financial Activity For the Period Ended 31 May 2020

# **10 BUDGET AMENDMENTS**

Amendments to the original budget since budget adoption. Surplus/(Deficit)

GL/JOB Code Description			Non Cach		aldelievo	Runna
	<b>Council Resolution</b>	Classification	Adjustment S	cash S	cash S	Balance Ś
Budget Adoption		Opening Surplus	ŀ	F	ŀ	132,227
Permanent Changes						
Opening surplus adjustment				103,568		235,795
2019/20 Upgrade of Gravel Pit East Road	26/06/2019 - 178-19	Capital Expense			(16,200)	219,595
Transfer from Reserve - Road Construction Reserve	26/06/2019 - 178-19	Capital Revenue		16,200		235,795
Ferguson Hall	17/07/2019 - 235-19	Capital Expense			(7,971)	227,824
Transfer from Reserve - Carried Forward Projects Reserve	17/07/2019 - 235-19	Capital Revenue		7,971		235,795
Depiazzi Park	17/07/2019 - 228-19	Capital Expense			(10,000)	225,795
Transfer from Reserve - Parks & Reserves Upgrades Reserve	17/07/2019 - 228-19	Reserve Transfer		10,000		235,795
Ferguson Valley Marketing for mobile visitor centre van.	14/08/2019 - 238-19	<b>Operating Expense</b>			(25,000)	210,795
Gnomesville master plan	14/08/2019 - 238-19	Capital Expense		25,000		235,795
Grant Revenue - Roads to Recovery	25/09/2019 - 277-19	Capital Revenue		63,204		298,999
Transfer from Reserve - Road Construction Reserve	25/09/2019 - 277-19	Reserve Transfer			(63,204)	235,795
Sundry Consultants - Other Governance	25/09/2019 - 286-19	<b>Operating Expense</b>			(20,000)	215,795
Road safety treatments - Hamilton Road and Recreation Drive	16/10/2019 - 294-19	Capital Expense			(4,200)	211,595
Transfer from Reserve - Road Construction Reserve	16/10/2019 - 294-19	Reserve Transfer		4,200		215,795
Changeover Vehicle DA004 - Mgr Development Services	16/10/2019 - 296-19	Capital Expense			(45,900)	169,895
Changeover Vehicle DA9668 - Mgr Information Services	16/10/2019 - 296-19	Capital Expense			(45,900)	123,995
New Vehicle - Director Sustainable Development	16/10/2019 - 296-19	Capital Expense			(71,400)	52,595
Sale of Vehicle - Town Planning	16/10/2019 - 296-19	Capital Revenue		22,950		75,545
Sale of Vehicle - Administration O/H	16/10/2019 - 296-19	Capital Revenue		22,950		98,495
Transfer from Reserve - Executive & Compliance Vehicles	16/10/2019 - 296-19	Reserve Transfer		117,300		215,795
Dardanup West Bush Fire Brigade Shed - Concrete Pad	06/11/2019 - 314-19	Capital Expense			(7,545)	208,250
Grant Revenue - Capital ESL	06/11/2019 - 314-19	Capital Expense		7,545		215,795
Grant - Fire Prevention - for Mitigation Activity Funding	27/11/2019 - 351-19	Operating Revenue		209,615		425,410
Grant Funding Expenditure - Bush Fire Mitigation Activity	27/11/2019 - 351-19	Operating Expense			(209,615)	215,795
Grant Revenue - Capital - Fire Prevention ESL	27/11/2019 - 344-19	Capital Revenue		15,134		230,929
Transfer from Reserve - Fire Control Reserve	27/11/2019 - 344-19	Reserve Transfer		2,885		233,814
installation of water tank, pump & electricity supply	27/11/2019 - 344-19	Capital Expense			(18,019)	215,795
Reimbursements - Insurance Scheme Surplus	27/11/2019 - 351-19	<b>Operating Revenue</b>		33,620		249,415
Reimbursement Revenue - Public Halls	27/11/2019 - 351-19	Operating Revenue			(7,297)	242,118
Fees & Charges - Lease of Reserves	27/11/2019 - 351-19	<b>Operating Revenue</b>			(06,790)	235,328
insurance - Admin OH	27/11/2019 - 351-19	Operating Expense			(15,000)	220,328

Continued next page



# Notes to the Statement of Financial Activity For the Period Ended 31 May 2020

Revised

# 10 BUDGET AMENDMENTS (continued)

Amendments to the original budget since budget adoption. Surplus/(Deficit)

Decrease in Budget Available Running	Cash Balance	220,328	(35,000) 185,328	220,328	(8,528) 211,800	220,328	(15,000) 205,328	(70,000) 135,328	205,328	(36,895) 168,433	205,328	(4,400) 200,928	(1,653,872) 319,560	(8,111) 311,449					
Increase in Available	Cash			35,000		8 578	21212	() ()		000,07 70,000	70,000	70,000 36,895	70,000 36,895						
Non Cash	Adjustment																		
	Classification		Operating Expense	<b>Reserve Transfer</b>	Capital Expense	Capital Expense		Operating Expense	Operating Expense Operating Expense	Operating Expense Operating Expense Operating Expense	Operating Expense Operating Expense Operating Expense Capital Expense	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer Operating Expense	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer Operating Expense Various	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer Operating Expense Various Operating Revenue	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer Operating Expense Various Operating Revenue Operating Revenue	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer Operating Expense Operating Revenue Operating Expense	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer Operating Expense Various Operating Revenue Operating Expense	Operating Expense Operating Expense Operating Expense Capital Expense Reserve Transfer Operating Expense Various Operating Revenue Operating Revenue
	<b>Council Resolution</b>		29/01/2020 - 09-20	29/01/2020 - 09-20	29/01/2020 - 10-20	29/01/2020 - 10-20		29/01/2020 - 05-20	29/01/2020 - 05-20 26/02/2020 - 15-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20 26/02/2020 - 28-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20 25/03/2020 - 28-20 25/03/2020 - 73-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20 25/03/2020 - 28-20 25/03/2020 - 73-20 25/03/2020 - 59-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20 26/02/2020 - 22-20 25/03/2020 - 59-20 25/03/2020 - 59-20 25/03/2020 - 59-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20 26/02/2020 - 22-20 25/03/2020 - 59-20 25/03/2020 - 59-20 25/03/2020 - 59-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20 26/02/2020 - 23-20 25/03/2020 - 59-20 25/03/2020 - 59-20 25/03/2020 - 59-20 25/03/2020 - 59-20	29/01/2020 - 05-20 26/02/2020 - 15-20 26/02/2020 - 15-20 26/02/2020 - 21-20 26/02/2020 - 21-20 26/02/2020 - 23-20 25/03/2020 - 59-20 25/03/2020 - 59-20 25/03/2020 - 59-20 27-05-2020 - 125-20
	Description	Brought forward from previous page	Building Special Maintenance - Eaton Recreation Centre	Transfer from Reserve - Building Maintenance	Eaton Foreshore Stage 1 - Colin Spragg Adventure Playground	Eaton Foreshore Stage 2		Consultation - fenced dog exercise area	Consultation - fenced dog exercise area Town Planning - General Consultants	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Construction - Eaton Recreation Centre	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Construction - Eaton Recreation Centre Transfer from Reserve - Building Maintenance	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Construction - Eaton Recreation Centre Transfer from Reserve - Building Maintenance Consultants - Parks & Gardens Reserves	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Construction - Eaton Recreation Centre Transfer from Reserve - Building Maintenance Consultants - Parks & Gardens Reserves Adoption of mid-year budget review - various amendments	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Construction - Eaton Recreation Centre Transfer from Reserve - Building Maintenance Consultants - Parks & Gardens Reserves Adoption of mid-year budget review - various amendments Reimbursement Revenue - Public Halls	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Construction - Eaton Recreation Centre Transfer from Reserve - Building Maintenance Consultants - Parks & Gardens Reserves Adoption of mid-year budget review - various amendments Reimbursement Revenue - Public Halls Fees & Charges - Lease of Reserves	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Construction - Eaton Recreation Centre Transfer from Reserve - Building Maintenance Consultants - Parks & Gardens Reserves Adoption of mid-year budget review - various amendments Reimbursement Revenue - Public Halls Fees & Charges - Lease of Reserves Community Grants - reduced expenditure	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Consultants - Strategic Planning Consultants - Eaton Recreation Centre Transfer from Reserve - Building Maintenance Consultants - Parks & Gardens Reserves Adoption of mid-year Budget review - various amendments Fees & Charges - Lease of Reserves Community Grants - reduced expenditure Small Business Quick Response Grants	Consultation - fenced dog exercise area Town Planning - General Consultants Consultants - Strategic Planning Consultants - Strategic Planning Consultants - Strategic Planning Consultants - Eaton Recreation Centre Transfer from Reserve - Building Maintenance Consultants - Parks & Gardens Reserves Adoption of mid-year budget review - various amendments Adoption of mid-year budget review - various amendments Fees & Charges - Lead Reserves Community Grants - reduced expenditure Small Business Quick Response Grants Consultancy - Economic Stimulus Package grant applications
	GL/JOB Code Description	Brought forward	J11807 B	1141001 T	J11505 E	J11594 E		1113505 C				0 0 0 0							

			RIS	<b>RISK ASSESSMENT TOOL</b>	ENT TOOL			
OVERALL RISK EVENT:		Failing to monitor the financial perform legislative requirement could result in a	ncial performan uld result in a qu	ance can increase t qualified audit.	Failing to monitor the financial performance can increase the risk of a negative impact on the Shire's financial position. Non-compliance with legislative requirement could result in a qualified audit.	e's financial positic	on. Non-complia	nce with
<b>RISK THEME PROFILE:</b>	FILE:							
3 - Failure to Fulfi	3 - Failure to Fulfil Compliance Requirements (Statutory, Regulatory)	Statutory, Regula	itory)					
<b>RISK ASSESSMENT CONTEXT:</b>	T CONTEXT: Operational	Jal						
		PRIOR TO T	PRIOR TO TREATMENT OR	DR CONTROL		AFTER TRE	AFTER TREATEMENT OR CONTROL	ONTROL
CATEGORY	RISK EVENT	CONSEQUENCE	поонизии	INHERENT RISK RATING	(Treatment or controls proposed)	CONSEQUENCE	TIKETIHOOD	RESIDUAL RISK RATING
НЕАLTH	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
FINANCIAL IMPACT	Not monitoring ongoing financial performance would increase the risk of a negative impact on the financial position.	Moderate (3)	Unlikely (2)	Moderate (5 - 11)	Not required.	Not required.	Not required.	Not required.
SERVICE INTERRUPTION	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.
LEGAL AND COMPLIANCE	Non-compliance with the legislative requirements that results in a qualified audit.	Minor (2)	Unlikely (2)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
REPUTATIONAL	Non-compliance that results in a qualified audit can lead stakeholders to question the Council's ability to manage finances effectively.	Insignificant (1)	Unlikely (2)	Low (1 - 4)	Not required.	Not required.	Not required.	Not required.
ENVIRONMENT	No risk event identified for this category.	Not Required - No Risk Identified	N/A	N/A	Not required.	Not required.	Not required.	Not required.



# MINUTES

# AUDIT & RISK COMMITTEE MEETING

Held

# 3 June 2020

At

eMeeting via www.dardanup.wa.gov.au

> This document is available in alternative formats such as: ~ Large Print ~ Electronic Format [disk or emailed] Upon request.

# **VISION STATEMENT**

"Provide effective leadership in encouraging balanced growth and development of the Shire while recognizing the diverse needs of our communities."

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COMMITTEE MEMBERSHIP:

-	CR. T GARDINER - CHAIRPERSON
-	CR M BENNETT – DEPUTY CHAIRPERSON
-	CR P ROBINSON
-	CR. C BOYCE
-	CR. M HUTCHINSON

#### TERMS OF REFERENCE

The Terms of Reference for this Committee are located in the Tardis records system – refer to the following link: <u>2019 - ToR - Audit and Risk Committee</u>

COMMITTEE ROLE						
Advocacy	When Council advocates on its own behalf or on behalf of its community to another level of government / body /agency.					
Executive/Strategic	The substantial direction setting and oversight role of the Council eg. Adopting plans and reports, accepting tenders, directing operations, setting and amending budgets.					
Legislative	Includes adopting local laws, town planning schemes and policies.					
Review	When Council reviews decisions made by Officers.					
Quasi-Judicial	When Council determines an application/matter that directly affects a person's rights and interests. The Judicial character arises from the obligations to abide by the principles of natural justice. Examples of Quasi-Judicial authority include town planning applications building licenses applications for other permit (licenses)					
	applications, building licences, applications for other permits/licences (eg: under Health Act, Dog Act or Local Laws) and other decisions that may be appealable to the State Administrative Tribunal.					
DISCLAIMER						

"Any statement, comment or decision made at a Council or Committee meeting regarding any application for an approval, consent or licence, including a resolution of approval, is not effective as an approval of any application and must not be relied upon as such.

Any person or entity that has an application before the Shire must obtain, and should only rely on, written notice of the Shire's decision and any conditions attaching to the decision, and cannot treat as an approval anything said or done at a Council or Committee meeting.

Any advice provided by an employee of the Shire on the operation of a written law, or the performance of a function by the Shire, is provided in the capacity of an employee, and to the best of that person's knowledge and ability. It does not constitute, and should not be relied upon, as a legal advice or representation by the Shire. Any advice on a matter of law, or anything sought to be relied upon as a representation by the Shire should be sought in writing and should make clear the purpose of the request."

RISK ASSESSMENT				
Inherent Risk	The level of risk in place in order to achieve the objectives of the Council and before actions are taken to alter the risk's impact or likelihood.			
Residual Risk	The remaining level of risk following the development and implementation of Council's response.			
Strategic Context	These risks are associated with achieving Council's long term objectives.			
Operational Context	These risks are associated with the day-to-day activities of the Council.			
Project Context	<ul> <li>Project risk has two main components:</li> <li>Direct refers to the risks that may arise as a result of project, which may prevent the Council from meeting its objectives.</li> <li>Indirect refers to the risks which threaten the delivery of project outcomes.</li> </ul>			

#### SHIRE OF DARDANUP

MINUTES OF THE SHIRE OF DARDANUP AUDIT & RISK COMMITTEE MEETING HELD ELECTRONICALLY [VIDEO CONFERENCING] ON WEDNESDAY 3 JUNE 2020, AT SHIRE OF DARDANUP - ADMINISTRATION CENTRE EATON, COMMENCING AT 2.00PM.

#### DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

The Chairperson, Cr. T G Gardiner declared the meeting open at 2.09pm welcomed those in attendance, advised and acknowledged that the meeting will be conducted as an electronic meeting in accordance with the Local Government (Administration) Regulations 1996 and refer to the Acknowledgement of Country and the Disclaimer and Affirmation of Civic Duty and Responsibility on behalf of Councillors and Officers and

#### Acknowledgement of Country

1

The Shire of Dardanup wishes to acknowledge that this meeting is being held on the traditional lands of the Noongar people. In doing this, we recognise and respect their continuing culture and the contribution they make to the life of this region by recognising the strength, resilience and capacity of Wardandi people in this land.

#### Affirmation of Civic Duty and Responsibility

Councillors and Officers of the Shire of Dardanup collectively declare that we will duly, faithfully, honestly and with integrity fulfil the duties of our respective office and positions for all the people in the district according to the best of our judgement and ability. We will observe the Shire's Code of Conduct and Standing Orders to ensure efficient, effective and orderly decision making within this forum.

Committee members acknowledge that only the Chief Executive Officer or a member of the Shire of Dardanup staff appointed by the Chief Executive Officer is to have contact with consultants and suppliers that are appointed under contract to undertake the development and implementation of projects.

The exception to this Policy is when there is a meeting of the committee or working group with the consultant and the Chief Executive Officer or the Chief Executive Officer's representative is present.

Members of committees acknowledge that a breach of this Policy may result in a request to Council to have them removed from the committee.

# 2. RECORD OF ATTENDANCE/APOLOGIES/LEAVE OF ABSENCE PREVIOUSLY APPROVED

#### Process:

The Chairperson, Cr. T.G. Gardiner confirmed that each person expected to attend the meeting was connected to the eMeeting platform and therefore in attendance. Cr T.G Gardiner called the names of elected members and staff. The following attendees responded when their name was called to confirm that they were in attendance.

*Cr. T.G Gardiner also asked if there was anyone in attendance where there name had not yet been recorded. There was no response. All attendees were accounted for as follows:* 

#### 2.1 Attendance

#### <u>Voting</u>

Cr Tyrrell Gardiner Cr. Michael Bennett Cr. Peter Robinson Cr. Carmel Boyce Cr. Mark Hutchinson	- - -	Chairperson Deputy Chairperson Deputy Shire President Elected Member Elected Member
Non-Voting		
Mr André Schönfeldt Mr Phil Anastasakis Mrs Natalie Hopkins Mr Ray Pryce Mrs Cindy Barbetti Mrs Donna Bailye Mr Zachary Hall		Chief Executive Officer Deputy Chief Executive Officer Manager Financial Services Accountant Compliance Officer PA – Deputy Chief Executive Officer Business Solutions Team Leader
Apologies		
Mr Luke Botica Mrs Susan Oosthuizen	-	Director Infrastructure Director Sustainable Development

#### 3. PRESENTATIONS

None.

2.2

4. CONFIRMATION OF MINUTES OF PREVIOUS MEETING				
4.1 Audit & Risk Committee Meeting Held 8 April 2020				
OFFICER RECOMMENDED RESOLUTION & AUDIT & RISK COMMITTEE RECOMMENDED RESOLUTION				
A 13-20 MOVED - Cr P Robinson SECONDED - Cr M Bennett				
THAT the Minutes of the Audit & Risk Committee Meeting held on 8 April 2020, be confirmed as true and correct subject to no corrections.				
CARRIEL				
5/0				
	& Risk Commit OMMENDED RE COMMITTEE F MOVED - THAT the Mi	& Risk Committee Meeting Held 8 Ap DMMENDED RESOLUTION & COMMITTEE RECOMMENDED RESO MOVED - Cr P Robinson THAT the Minutes of the Audit &	& Risk Committee Meeting Held 8 April 2020 DMMENDED RESOLUTION & COMMITTEE RECOMMENDED RESOLUTION MOVED - Cr P Robinson SECONDED - THAT the Minutes of the Audit & Risk Committee Meeting	

## ANNOUNCEMENTS OF MATTERS FOR WHICH MEETING MAY BE CLOSED

None.

5.

# 6. QUESTIONS BY MEMBERS OF WHICH DUE NOTICE HAS BEEN GIVEN

None.

## 7. DECLARATION OF INTEREST

"Members should fill in Disclosure of Interest forms for items in which they have a financial, proximity or impartiality interest and forward these to the Presiding Member before the meeting commences."

Key Management Personnel (which includes Elected Members, CEO and Directors) are reminded of their requirement to disclose biannually transactions between Council and related parties in accordance with Council Policy CP039.

#### **eMEETING PROCESS – ADVICE TO PUBLIC & ELECTED MEMBERS**

Discussion:

*Chairperson, Cr. T Gardiner asked Councillors if there were any Declarations of Interest to be made.* 

There were no Declarations of Interest made.

Chief Executive Officer, Mr André Schönfeldt advised that no Declarations of Interest had been received prior to the meeting.

# REPORTS OF OFFICERS AND COMMITTEES

## 8.1 <u>Title: Risk Dashboard Biannual Report</u>

8

Reporting Department:	Corporate & Governance Directorate		
Reporting Officer:	Mrs Cindy Barbetti - Compliance Officer		
Legislation:	Local Government Act 1995 and Local Government (Audit) Regulations 1996, Regulation 17		

#### <u>Overview</u>

The purpose of this report is to present the six monthly Risk Dashboard Report to the Audit and Risk Committee for consideration.

#### **Background**

In August 2019, Council through the Audit and Risk Committee adopted the revised Risk Management Governance Framework (the Framework) for the Council. The Framework has been developed to connect all of the risk management processes and methodologies and to clearly articulate the appetite for risk. This ensures Council's commitment to meeting its compliance obligations pursuant to the Local Government (Audit) Regulations 1996, Regulation 17.

In accordance with the reporting requirements of the Framework, the Compliance Officer is required to present the Audit and Risk Committee with a Risk Dashboard Report (Appendix AAR 8.1A) every six months. In addition, the Terms of Reference for the Audit and Risk Committee state the following as a committee objective:

# 5.7 To consider the Shire of Dardanup Risk Management Governance Framework and progress on the relevant action plans biannually.

The Risk Dashboard Report has been developed as part of the Framework and in collaboration with a risk consultant from Council's insurer (LGIS), and contains an overall snapshot of the following 15 Risk Theme Profiles:

- 1. Asset Sustainability Practices.
- 2. Business and Community Disruptions.
- 3. Failure to Fulfil Compliance Requirements (Statutory, Regulatory).
- 4. Document Management Processes.
- 5. Employment Practices.
- 6. Engagement Practices.
- 7. Environment Management.
- 8. Errors, Omissions and Delays.
- 9. External Theft and Fraud (includes Cyber Crime).
- 10. Management of Facilities, Venues and Events.
- 11. IT, Communication Systems and Infrastructure.
- 12. Misconduct.
- 13. Project/Change Management.
- 14. Safety and Security Practices.
- 15. Supplier and Contract Management.

## Legal Implications

Local Government Act 1995 Local Government (Audit) Regulations 1996, Regulation 17:

- 17. *CEO to review certain systems and procedures* 
  - (1) The CEO is to review the appropriateness and effectiveness of a local government's systems and procedures in relation to
    - (a) risk management; and
    - *(b) internal control; and*
    - (c) legislative compliance.
  - (2) The review may relate to any or all of the matters referred to in subregulation (1)(a), (b) and (c), but each of those matters is to be the subject of a review at least once every 2 calendar years.
  - (3) The CEO is to report to the audit committee the results of that review.

[Regulation 17 inserted in Gazette 8 Feb 2013 p. 868.]

## Strategic Community Plan

- Strategy 1.1.2 Monitor and ensure compliance with the regulatory framework for local government governance and operations. (Service Priority: High)
- Strategy 1.1.3 Maintain best practice governance systems and practices. (Service Priority: Moderate)
- Strategy 1.3.6 Establish a Risk Management Governance Framework for the Shire of Dardanup. (Service Priority: High)
- Environment None.

## <u>Precedents</u>

The Audit and Risk Committee previously received a Risk Dashboard Report at the December 2019 meeting.

## **Budget Implications**

As part of the Compliance Officer role, regular reporting of the Risk Management Governance Framework is essential. Therefore the cost to Council is through staff time and the usage of IT/Software systems where applicable.

<u>Budget – Whole of Life Cost</u> - None.

As no assets/infrastructure is being created, there are no whole of life costs relevant to this item.

## Council Policy Compliance

Risk Management Governance Framework

- Administration Policy AP023
- Procedure PR036
- Australian Standard AS/NZS ISO 31000:2018 Risk Management Principles and Guidelines

## Risk Assessment

The Risk Management Governance Framework has been considered in arriving at the officer recommendation. Please refer to (Appendix AAR 8.1B)

Tier 2 – 'Low' or 'Moderate' Inherent Risk.			
Risk Event	Risk Dashboard Biannual Report		
Inherent Risk Rating (prior to treatment or control)	Low (1 - 4)		
Risk Action Plan (treatment or controls proposed)	As the Inherent Risk Rating is below 12, this is not applicable.		
Residual Risk Rating (after treatment or controls)	As the Inherent Risk Rating is below 12, this is not applicable.		
Diele Catagory Assessed	Legal and Compliance	Failure to fulfil compliance obligations pursuant to the Local Government (Audit) Regulations 1996, Regulation 17.	
Risk Category Assessed Against	Reputational	Council's reputation could be seen in a negative light for not adhering to its requirement to fulfil duties and functions that are prescribed in legislation.	

# Officer Comment

The Risk Dashboard Report for June 2020 (Appendix AAR 8.1A) provides members of the Audit and Risk Committee with the current treatment plans (actions) that have been identified by management to improve certain key control ratings. Typically these control ratings have been identified as inadequate and a treatment plan (action) has been determined to improve the control effectiveness to at least adequate.

The format of the Dashboard enables each treatment plan (action) to be categorised according to the relevant 15 risk theme profiles and provides the following information:

- The overall control rating (how effective the controls in place are operating).
- The overall risk rating (the determined level of risk).
- The overall assigned officer for the theme profile according to the level of risk responsibility:
  - Low responsibility of Staff Member/Supervisor
    - Moderate responsibility of Supervisor/Manager
    - High responsibility of Manager/Director/EMT
    - Extreme responsibility of EMT/CEO/Council
- The current treatment plan based on the following evaluation of risks:
  - Controls that are rated as inadequate must have a treatment plan to improve the control effectiveness to at least adequate.
  - > Where the residual risk rating is high or extreme, treatment plans must be implemented.
- The due date of the treatment.
- The officer responsible for managing the individual treatment plans.

To provide a comparison between reporting periods, table 1 below indicates that there are currently 23 treatments in place, compared with 30 treatments in December 2019. 5 new treatments have been added, with 12 being completed in the last 6 months. As treatments are cleared or completed they are removed from the Dashboard. To note, some extensions on the due dates have been granted for uncompleted treatments, as a direct result of COVID-19 impacting officer's workload.

## **Table 1 – Treatment Plan Summary**

December 2019 (last reporting period)		June 2020 (this reporting period)			
Total	Completed	In Progress	Total	New	In Progress
30	12	18	23	5	18

The Risk Dashboard Report also provides an indication to the Audit and Risk Committee of the value of the combined controls in mitigating the risk. Of the 15 Risk Profile Themes, 13 have had their combined controls rated as adequate and 2 as effective. By regularly reviewing the effectiveness and efficiency of controls and the appropriateness of treatment options selected, we can determine if Council resources are being put to the best use possible.

The Audit and Risk Committee can expect the next Risk Dashboard Biannual Report at the committee meeting scheduled for 2 December 2020.

<u>Committee Role</u> - Legislative.

*Voting Requirements* - Simple Majority.

*<u>Change to Officer Recommendation</u> - No Change.* 

# OFFICER RECOMMENDED RESOLUTION & AUDIT & RISK COMMITTEE RECOMMENDED RESOLUTION

AAR 14-20 MOVED - Cr C Boyce SECONDED - Cr M Bennett

THAT the Audit and Risk Committee receive the Risk Dashboard Report provided in (Appendix AAR 8.1A).

CARRIED 5/0

## 8.2 Title: Update on the Financial Management Systems Review Actions

Reporting Department:	Corporate & Governance			
Reporting Officer:	Mr Phil Anastasakis - Deputy Chief Executive Officer			
Legislation:	Local Government Act 1995 and Local Government (Financial Management) Regulations 1996			

#### <u>Overview</u>

This report provides the Audit and Risk Committee with an update on the implementation of the Financial Management Systems Review (FMSR) actions.

#### **Background**

In accordance with regulation 5(2)(c) Local Government Financial Management Regulation 1996, the Chief Executive Officer is required to undertake reviews of the appropriateness and effectiveness of the financial management systems and procedures of the Local Government regularly (not less than once in every 3 financial years) and report to the Local Government the results of those reviews. This review was undertaken by AMD Chartered Accountants in February 2019 and the report, along with management comments were presented to the Audit Committee meeting held on 6 March 2019.

Since that time, regular updates on outstanding items have been provided to the former Audit Committee, and since December 2019 the Audit and Risk Committee. At the meeting of the Audit and Risk Committee on the 4 March 2020 and subsequent Council meeting of 25 March 2020, the following was resolved [54-20]:

THAT Council acknowledges that action 7.2.1 Code of Conduct, will remain outstanding until mid-2020 when the Department of Local Government, Sport and Cultural Industries releases model Codes of Conduct.

This report is provided to the members of the Audit and Risk Committee as an update by management on the current status of the only outstanding action resulting from the review, being 7.2.1 Code of Conduct.

## Legal Implications

Local Government Act 1995 Local Government (Financial Management) Regulations 1996 (as Amended):

- (2) The CEO is to
  - c) undertake reviews of the appropriateness and effectiveness of the financial management systems and procedures of the local government regularly (and not less than once in every 3 financial years) and report to the local government the results of those reviews.

#### Strategic Community Plan

- Strategy 1.1.2- Monitor and ensure compliance with the regulatory framework for local government governance and operations. (Service Priority: High)
- Strategy 1.1.3- Maintain best practice governance systems and practices. (Service Priority: Moderate)

*Environment* - None.

# Precedents

The previous review was undertaken by Butler Settineri in 2015 and presented to the Chief Executive Officer on 13 January 2016. The scope of the previous review was to compare the financial policies adopted by the Shire with the minimum requirements of the Local Government Act 1995 and its associated regulations and to determine the extent to which the stated policies and procedures as adopted by the Shire have been implemented by the Chief Executive Officer.

# **Budget Implications**

The annual budget provides sufficient expenditure allocation for consultancies to cover the cost of the next review which will capture the period from January 2019 to December 2021.

# Budget - Whole of Life Cost

As no assets/infrastructure is being created, there are no whole of life costs relevant to this item.

<u>Council Policy Compliance</u> - None.

## Risk Assessment

The Risk Management Governance Framework has been considered in arriving at the officer recommendation. Please refer to (Appendix AAR: 8.2) for full assessment document.

Tier 2 – 'Low' or 'Moderate' Inherent Risk.			
Risk Event	Financial Management System review not being undertaken in accordance with regulation 5(2)(c) Local Government Financial Management Regulation 1996 and not less than once in every 3 financial years.		
Inherent Risk Rating (prior to treatment or control)	Low (1 - 4)		
Risk Action Plan (treatment or controls proposed)	As the Inherent Risk Rating is below 12, this is not applicable.		
Residual Risk Rating (after treatment or controls)	As the Inherent Risk Rating is below 12, this is not applicable.		
Risk Category Assessed Against	Legal and Compliance	Failure to fulfil compliance obligations pursuant to regulation 5(2)(c) of the Local Government (Financial Management) Regulations 1996.	
	Reputational	Council's reputation could be seen in a negative light for not adhering to its requirement to fulfil duties and functions that are prescribed in legislation.	

As the Financial Management System review was completed by an independent professional third party recognised accounting firm and delivered within the required timeframe (not less than once in every 3 financial years), the Risk Assessment for this report is considered low.

# Officer Comment

The Code of Conduct (Item 7.2.1) remains the only outstanding action from the February 2019 Financial Management Systems Review. The auditor's recommendation and management comment for this action is provided in the table below:

Ref	Issue	Risk Rating	Proposed Completion Date	Status
7.	Preparation of budgets, budget reviews, accounts and report	's required by th	e Act or the Regula	tions
7.2.1	Code of Conduct The Shire Code of Conduct for Council Members, Committee Members and Staff was last reviewed and adopted by Council on the 6 November 2013.	Minor	Former proposed completion date: 31 December 2019 Now extended to: 30 June 2020	In Progress
	Auditor Recommendation We recommend the Code of Conduct be reviewed and sub Committee Members and Staff. Management Comment Management acknowledges and accepts the recommendation WALGA during 2018 to review the Code of Conduct. This Government Act review.	. Council staff h	ave been working with	Councillors and

Management have advised that they anticipate the model Codes of Conduct, both for Employee's and Elected Member's, will be presented to the Ordinary Council Meeting on 24 June 2020 for Council's consideration.

If these models are successfully endorsed by Council, all outstanding action items resulting from the February 2019 Financial Management Systems Review will be completed. This report will therefore serve as the final update to the members of the Audit and Risk Committee.

<u>Committee Role</u> - Legislative.

*Voting Requirements* - Simple Majority.

OFFICER RECOMMENDED RESOLUTION & AUDIT & RISK COMMITTEE RECOMMENDED RESOLUTION

THAT the Audit and Risk Committee receive the June 2020 update report on the implementation of actions required from the findings of the February 2019 Financial Management Systems Review.

## Discussion:

At the meeting the Officer advised the Committee that the model Code of Conduct for Employee's and Elected Member's would not be presented to the Ordinary Council Meeting on 24 June 2020 as anticipated, but would be presented once the new Model was provided through WALGA after new legislation was adopted. This may result in a new model not being available for twelve months or longer.

## Change to Officer Recommendation

As per Local Government (Administration) Regulations 1996 11(da) Council records the following reasons for amending the Officer Recommended Resolution:

• A Refresher Course is to be provided to Councillors within the next 3 months on the Shire of Dardanup's current Code of Conduct.

(Appendix ORD: 12.16) <sup>11</sup>

## ELECTED MEMBER & AUDIT & RISK COMMITTEE RECOMMENDED RESOLUTION

AAR 15-20 MOVED - Cr M Bennett SECONDED - Cr P Robinson

THAT the Audit and Risk Committee:

- 1. Receive the June 2020 update report on the implementation of actions required from the findings of the February 2019 Financial Management Systems Review.
- 2. Request that a Refresher Course is undertaken on the current Code of Conduct within the next 3 months, and acknowledges that the Code of Conduct will only be reviewed once the new Regulations come into place.

CARRIED 5/0

# 9. ELECTED MEMBER MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

None.

# 10. NEW BUSINESS OF AN URGENT NATURE

None.

# 11. MATTERS BEHIND CLOSED DOORS

None.

# 12. CLOSURE OF MEETING

Process:

Before closing the meeting, Chairperson, Cr. T.G. Gardiner made a final 'roll call' so the Minutes evidence continued attendance of Elected Members at the eMeeting and record attendance. The following were confirmed as in attendance:

Cr Tyrrell Gardiner	-	Chairperson
Cr. Michael Bennett	-	Deputy Chairperson
Cr. Peter Robinson	-	Deputy Shire President
Cr. Carmel Boyce	-	Elected Member
Cr. Mark Hutchinson	-	Elected Member
Mr André Schönfeldt	-	Chief Executive Officer
Mr Phil Anastasakis	-	Deputy Chief Executive Officer
Mrs Natalie Hopkins	-	Manager Financial Services
Mr Ray Pryce	-	Accountant
Mrs Cindy Barbetti	-	Compliance Officer
Mrs Donna Bailye	-	PA – Deputy Chief Executive Officer
Mr Zachary Hall	-	Business Solutions Team Leader

The Chairperson advises that the date of the next Integrated Planning Committee Meeting is to be 2 September 2020

There being no further business the Chairperson declared the meeting closed at 2.24pm