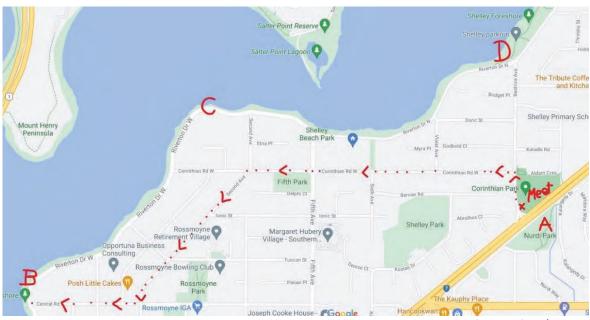
Proposed Meeting (YELLOW ARROW) + stopping sites (WHITE ARROWS) + lunch (BLUE ARROW) for CRREPA/CoC/SERCUL Site Tour with Perth NRM members & community Thursday 23rd September, 2021 (10:45am-1pm)

(Note: Toilets at Nurdi Park + end/lunch (Shelley Beach Park))

CRREPA = dots = area of activity / focus [Source: Google Earth]

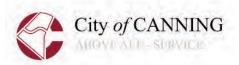




Source: Google Maps

On 23rd Sept = **Grecian Sandwell CRREPA** 0407 460585

Pre 23rd Sept = **Colma Keating CRREPA** 0407180660 <u>dinkum.results@gmail.com</u>





REHABILITATION AND COLLABORATION on-site visit to Nurdi Living Stream (Riverton) and Lower Canning River / Djarlgarra Foreshore

(Shelley-Rossmoyne, WA)

with

PerthNRM Members & Community



Thursday 23rd September, 2021 11am – 1pm (incl light lunch)

(10:45am = Meet & Rego opp 41 Beatrice Ave, Shelley)

INDEX + NOTES

CRREPA – background • established 1994	1-4
 acknowledge we are on Whadjuk Noongar lands and together we continue to care for country local community-based, not-for-profit, voluntary organisation working to protect and restore the health, diversity and productivity of the Canning River/Djarlgarra and Bull Creek estuarine environments work closely with City of Canning (CoC), State Government agencies (primarily DBCA, SRT), local schools, service groups, corporates and landcare /environment organisations hands-on foreshore care, contribution to research and environmental advocacy, local sharing of knowledge https://www.sercul.org.au/crrepa/ https://www.facebook.com/Canning-River-Residents-Environment-Protection-Association-427398184137201/ 	
City of Canning (CoC) The City actively manages 366 hectares of natural wetland, river and bushland areas with support from local community groups (refer Shelley Rossmoyne Foreshore Management plan 2019). These natural areas are considered key assets of the City as they provide beautiful places for the community to visit and enjoy, offer protection to remnant vegetation communities, provide a habitat for a wide variety of wildlife and help to sustain important ecological functions and processes. https://www.canning.wa.gov.au/our-community/community-initiatives/conservation-and-environment	5
South East Centre for Urban Landcare (SERCUL) • formed in 2003 as an independent community Natural Resource Management body in Perth, WA • undertake a variety of community and partnership projects that meet our objectives and ensure our vision is being achieved. These projects fall within three main categories: • Landcare & Restoration + Environmental Education + Monitoring & Research • https://www.sercul.org.au/	5
City of Canning (CoC) – examples of legislative &/or guiding policies, strategies and plans including: • Watercourse Reserves Management Strategies (2006)	7

- Local Biodiversity Strategy (2017)
- Shelley Rossmoyne Foreshore Management Plan (2019) including 'Significant Habitat Areas' Local Biodiversity Strategy (2017)
- https://www.canning.wa.gov.au/our-community/community-initiatives/conservation-and-environment

Drain locations

- originally 49 open and under ground catchment drains emptying into river
- some large catchments from roads, old waterlines, wetlands and road run-off
- 7 now converted to living drain or living stream to reduce nutrients entering Lower Canning River and to increase biodiversity

Environmental vandalism

- Damage to vegetation deliberate and/or unthinkingly
- Damage to wildlife deliberate and/or unthinkingly

SITE NO.	SITE NAME	LOCN.	DATE	PAGE
OHE NO.	OTTE TO UNE	RIVERTON DRIVE	Ditte	17102
	Nurdi Park Living Drain – Beatrice Ave Main Drain BAMDKD	Nurdi Way,	2019	8-14
	Direct link to Lower Canning at Grecian's Spit	Riverton	2019	0-14
	Water Corporation owned & managed asset	Tavorton	2020	
	· · · · · · · · · · · · · · · · · · ·	(South of	on	
	 Collaboration with Water Corporation (WC), City of Canning (CoC), Dept Biodiversity, Conservation & Attractions (DBCA), South East 	Beatrice	ground	
	Regional Centre for Urban Landcare (SERCUL), CRREPA and local	Avenue and		
	community	Leach		
	•	Highway		
	Australian Government Swan Canning River Recovery Program Creat (2010) managed by PorthNPM	intersection,		
	Grant (2019) managed by PerthNRM	Shelley)		
	converting open drain to a Living Stream the inlet into the first begin (southern) is fed from a nine.			
	 the inlet into the first basin (southern) is fed from a pipe just before the bridge in the open drain, and also from an 			
	underground pipe across the park linking drainage to the			
	streets. This particular part of Riverton is subject to minor			
	flooding during high rain events			
	engineering & environmental design (Water Corp, DBCA, CoC, SEBCUL Surjay, Koru)			
	SERCUL, Syrinx, Karu).			
	 Syrinx and the City of Canning drainage/engineering team contributed most to design. 			
	TI 011 (0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	o The City of Canning made an enormous contribution completing the major earthworks.			
	 SERCUL came in after earthworks installing the erosion 			
	jute and coir matting and log palisades. SERCUL did all of			
	the planting except for the community event which			
	competed the revegetation in November 2021. These			
	contributions are reflected in the costings below.			
	 major engineering and rehabilitation works (2020) 			
	 CoC community engagement (design, planting, care) incl CRREPA 			
	Ongoing management			
	 SERCUL has a signed two-year contract to remove litter, 			
	perform weed control and supply and install infill plants.			
	Includes completing the planting along Kalangedi Drive			
	which we couldn't do in 2021 because the retic wouldn't			
	reach! This work is funded through \$20k from Watercorp, and \$60k from Perth NRM SCRRP3. We will also work			
	with the City to design and install some interpretive			
	signage.			
	Costings:			
	Watercorp - \$110k – funded Syrinx to produce a design			
	o Perth NRM (SCRRP2) – paid \$150k – funded SERCUL to			
	coordinate, implement and supply erosion control materials			
	and revegetation including plants			
	 City of Canning - \$160k – approvals, earthworks, 			
	construction and materials			
	 City of Canning (Stage 2) - \$120k – fencing, mulch, 			
	reticulation and bridge			

CoC project 'open' living drain 23 Halophila Bay o			
• 'open' living drain 23 Halophila Bay o	pp 53	2015	15
23 Halophila Bay o			
	pp 133-137	2009	16
Riverbank Grant (2009)			
 erosion issues (path and roadway asset risk) 			
 hard engineering - rock toe & telegraph poles (CoC) 			
06b Rob Bruce East – ENVIRONTMENAL VANDALISM o	pp 193-201	2020	
over 5 weeks			
 3+ truckloads of illegal cuttings removed (CoC) including from 			
damage in Rob Bruce Park & on Corinthian Road verges			
CoC took legal action against local (not Riverton Drive) property			
owner. Conviction obtained (January 2021) but granted spent			
conviction. CoC erected sign in Rob Bruce Park.			
DBCA erected sign on foreshore.			
	pp 233-237	2013	17
 open living drain 2013 (CoC engineering) 			
 bubble-up living drain 2014 (CoC engineering) 			
Simple Lessons from the Lower Canning			18
splitting up the foreshore			
one hour, tools down			
adding 'enjoyment & discovery'			
 moving to different sites on corporate weeding days 			
doing 'stuff' with fellow groups			
the power of happy snaps			
nature's help along the way			
(EXTRACT: Urban Bushland Council - Urban Telegraph - Summe	er 2015-2016)		
Barrier Strip			19
 separating foreshore vegetation from parkland grasses 			
stops grasses invading natural vegetation			
allows natural vegetation expansion upslope			
 provides clear sightline for parkland mowing staff, so that natural rehabilitation not cons 	stantly mown		
 moved from mulch/woodchips to chemical barrier applied by CoC 			
AERIAL PHOTO + Importance of Birds at Grecian's Spit (Beatrice Ave) o	pp 239-245		20
·	pp 239-243		
inspectant hind resting and feeding area prosted by Destrice Ave Main			20
important bird resting and feeding area created by Beatrice Ave Main Project RANDICD Project RANDICD On the project of			20
Drain BAMDKD			20
Drain BAMDKD • Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan			20
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Drain BAMDKD Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 2019 Shorebirds 2020 – national recording site Birds in Backyards – national recording site Grecian's Spit (Beatrice Ave) West WA Community Rivercare Grant (2018)	орр 243-245	2018	
Drain BAMDKD Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 2019 Shorebirds 2020 – national recording site Birds in Backyards – national recording site Grecian's Spit (Beatrice Ave) West WA Community Rivercare Grant (2018) soft approaches	орр 243-245	2018	
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Drain BAMDKD Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 2019 Shorebirds 2020 – national recording site Birds in Backyards – national recording site Grecian's Spit (Beatrice Ave) West WA Community Rivercare Grant (2018) soft approaches long term fencing (CoC) Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan	орр 243-245	2018	
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	(0.11.7) (0.11.7) (0.11.7)			1
	Swan Alcoa Landcare Program (SALP) Grant (2006)			
	• soft approaches			
	long term fencing (CoC)			
	 Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 2019 (sign erected 2021) 			
	 direct link to eastern portion of Beatrice Main Drain (BAMDKD) in Nurdi Park (referbelow, last location) 			
Self-Gui	ded Foreshore Walk (1) by CRREPA (2001 and 2015)			26-27
JCII-Gui	Highlighting cultural and environmental aspects including 'Convict Fence' – loom to	centre of river		20-27
09				
00	remnant vegetation (10-12 mature trees) on private property being felled (2020)	орр осо	2020	28
	 gifting of one Flooded Gum to foreshore (demolition contractor) 			
	 positioning along foreshore reserve (CoC) 			
12	Wadjup Point West - Tuart & Gabions	opp 347	2009	29
	 erosion affecting assets (Tuart, dual use path, road) 			
	 hard engineering – gabions 2010 + 2019 (CoC) 			
	 important bird resting & feeding area 			
	 Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 			
	2019 (sign erected 2021)			
	 Sand replenishment program (2020) 			
12	Wadjup Point East – Living Drain	opp 355-357	2009	30
	 bubble-up living drain (2013) 			
	 engineering works (CoC) 			
	 soft approaches around bubble-up 			
	 Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 2019 			
	Permanent fence & sign (2020)			
12	Wadjup Point East – Tuart	opp 355-357	2017	
	 Erosion affecting assets – Tuart, dual use path) 			
	 engineering works (CoC) 			
	 Matting, coir logs, limestone boulders and vegetation 			
	 Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 2019 			
	Permanent fence & sign (2020)			
	Birds at Wadjup Point			
	 Important bird resting & feeding area 			
	 Significant Habitat Area – CoC Shelley Rossmoyne Foreshore Plan 2019 			
	 Shorebirds 2020 – national recording site 			



https://www.sercul.org.au/crrepa/

https://www.facebook.com/Canning-River-Residents-Environment-Protection-Association-427398184137201/

crrepa@gmail.com



CRREPA has a track record of designing and implementing effective, inclusive projects along the southern foreshore of the Canning River / Djarlgarra between Shelley Bridge and Bull Creek that combine the needs of the natural environment, volunteers, local and state authorities and sponsors.

To do this, over the past twenty-seven (27) years CRREPA has engaged the range of:

- local seed collecting
- seed propagating
- planting
- summer watering
- mulching
- removal of annual and woody weeds
- continual maintenance of the foreshore
- water quality testing and recording
- bird observations and recording
- rubbish removal
- community planting days
- quided foreshore walks
- public information displays
- photographic recording and sharing

- sharing our knowledge and learnings with other groups through organising onsite rehabilitation tours
- sharing our knowledge, local updates, alerts, natural wonders and fabulous photos via CRREPA Facebook and CRREPA News
- contributing to community forums and planning documents (eg organised by the City of Canning, Swan River Trust, SERCUL)
- increasing the group's knowledge and understanding by seeking information, attending seminars, field tours etc.

Organisations with whom CRREPA has worked include:

- City of Canning (CoC) Mayors, Councillors and officers
- Lions Club of Booragoon longstanding monthly working relationship since 2007
- Local community residents
- Work for the Dole
- Wildflower Society Murdoch Branch
- Water Corporation
- WA Landcare Network (WALN)
- Urban Bushland Council (UBC)
- Swan River Trust (SRT)
- Swan Estuaries Action Group (SERAG)
- South West Group (SWG)
- South Metropolitan TAFE Certificate IV Conservation & Land Management
- South East Centre for Urban Landcare (SERCUL)
- Shelley-Rossmoyne Scouts
- Shelley Primary School
- Rossmoyne Primary School (including River Rangers)

- River Guardians
- Queen of Apostles Primary School
- Probis
- PerthNRM
- Landcare Australia Limited (LAL)
- Ecomedia Susan Harris
- Ecojobs/Greenskills
- Department of Biodiversity, Conservation and Attractions (DBCA
- Corporates including RAC, Woodside.
- Conservation Volunteers Australia (CVA)
- Conservation Council WA (CCWA)
- Catchment-wide fellow Urban Landcare Groups including Canning River Regional Park Volunteers, Friends of Queens Park Bushland, Friends of Rossmoyne Park Bushland, Friends of Gabbiljee (Bull Creek), Wilson Wetlands Action Group
- Canning Sea Scouts
- CALM Bushrangers (Rossmoyne High School)
- All Saints College



CRREPA acknowledges the Whadjuk people of the Noongar nation as the traditional custodians of this land. Together we continue to care for country.



Your local Canning River Residents Environment Protection Association

CRREPA NEWS No. 41 October 2014 Page 7

CRREPA NEWS

Newsletter of the Canning River Residents Environment Protection Association (Inc)

Editors: Stephen Johnston and Sue Stanley
ENJOY YOUR FORESHORE RESPONSIBLY

Members please contact us by phone (0422 590 029) or email (CRREPA@gmail.com) or postal address (CRREPA Members Officer: 16 Nearwater Way, Shelley 6148)

To see your CRREPA Newsletter in COLOUR view or download it from the SERCUL website.

www.sercul.org.au/crrepa

Please 'like' us on Facebook by viewing 'Canning River Residents Environment Protection Association'

VOLUNTEERS EXTEND FORESHORE REVEGETATION NEAR CORINTHIAN ROAD

One of the longest stretches of foreshore revegetation is almost complete after CRREPA volunteers planted a section of about 50 metres from near the junction of Corinthian Road and Riverton Drive, Rossmoyne to 121 Riverton Drive.

A total of 31 volunteers, including one of our two local councillors, Amanda Spencer-Teo, planted the 1390 seedlings over two sessions on 25th June and 2nd July. The project was funded by a Department of Biodiversity, Conservation and Attractions (DBCA) Community Rivercare grant.

The City of Canning provided good support for our work with letters notifying nearby residents of the conversion of the

Stanley

grassed site into an area of local groundcovers, small plants and shrubs. The City's Natural Areas Team (NAT) poisoned the grass, augured the planting holes, watered the seedlings in with a wetting agent and constructed the fence which will protect the young plants from trampling until they are sufficiently well established in about three years' time.

When the last 10-metre section is planted next year after a swale is dug to mitigate the erosion caused by water flowing down Corinthian Road and off Riverton Drive, the revegetated section will extend from south-west of Corinthian Road for about 250 metres. It will encompass what is now mature growth but was one of CRREPA's first projects in the mid 1990s, this year's planting and the 2016 revegetation plot from 123-129 Riverton Drive with a section in the middle of Swan River myrtle (*Hypocalymma angustifolium*) planted by the City of Canning.





CRREPA NEWS No. 58 September 2020 Page 1





Foreshore coordinator Sue Stanley and volunteers also undertook infill planting at the Rob Bruce revegetation plot, at Beatrice Avenue and Wadjup Point using the City's annual donation of 500 local plants and 560 excess seedlings from the Community Rivercare Grant. This year we included some mid-level plantings of *Melaleauca lateritia* (robin red-breast bush) and *Acacia puchella* (prickley moses) which grow up to two metres tall. We have re-introduced *Rhagodia baccata* (berry saltbush) to our plant list. Although it has an insignificant flower it produces masses of deep red berries which are eaten by both birds and lizards. A good specimen of *Rhagodia baccata* can be seen along the path at Yagan Reserve.

After another winter of below average rainfall, a major focus will now be on watering all the new plants through the months of November though to April. The task will be greatly assisted by a grant of \$4950 from Perth NRM to enable CRREPA to contract additional watering capacity and reduce the requirement for volunteers to use the water tank and trailer that we borrow from the South-East Regional Centre for Urban Landcare (SERCUL). However, volunteers will still play a critical role in watering various other sites along the foreshore.

In Yagan Wetland Reserve there will be weed treatment in spring for Fumaria, Gladioli and Arum Lilies with the selective herbicide Metsulfuron as part of the City's geophyte program. Geophytes are perennial plants which in spring propagate from an underground organ such as a bulb, tuber, corm or rhizome. The City will also be using a contractor to treat other priority weeds, including woody exotic trees, with retreatment next year.

Meanwhile, CRREPA has welcomed construction of the fence at Wadjup Point that will provide some protection for resting and feeding water birds from interference by people and dogs at what is recognised in the foreshore management plan as a significant habitat area. The fence, which includes two lockable gates, surrounds all the revegetated areas but allows access to the beach on the western side. A sign will be erected on the western side fence requesting the public refrain from accessing the beach especially if the Fairy Terns are using the eastern node.







The **City of Canning (CoC)** is located in Perth's south-eastern suburbs, about 10km from the Perth CBD and covers a total of 65km². Made up of 16 suburbs including Bentley, Cannington, East Cannington, Ferndale, Lynwood, Parkwood, Queens Park, Riverton, Rossmoyne, Shelley, Welshpool, Willetton, Wilson and parts of the suburbs of St James, Canning Vale and Leeming.

We are fortunate to have the beautiful Canning River (Djarlgarro Beelier in Noongar) snaking its way through our borders and love seeing people out and about enjoying the river and its nearby trails, walking and cycle paths.

Home to two industrial hubs (Canning Vale & Welshpool) and we will see the heart of Cannington revitalised with the \$76m Canning City Centre rejuvenation program which commenced in 2019.

Our vision is to make Canning a welcoming and thriving City. View <u>Our Future</u> section to learn more about our vision and how we plan to make realise it.

The City of Canning recognises the Whadjuk people of the Noongar nation as the Traditional Owners and Custodians of the lands in Canning and pays respect to Noongar Elders past, present and future. Through its dedication to Reconciliation, the City is working with Aboriginal people to preserve and restore Country. A Welcome to Country video can be viewed here

To learn more about Noongar Culture and Heritage including birds and plants of Country, click here

Land Management – The City actively manages 366 hectares of natural wetland, river and bushland areas with support from local community groups (refer Shelley Rossmoyne Foreshore Management plan 2019). These natural areas are considered key assets of the City as they provide beautiful places for the community to visit and enjoy, offer protection to remnant vegetation communities, provide a habitat for a wide variety of wildlife and help to sustain important ecological functions and processes.

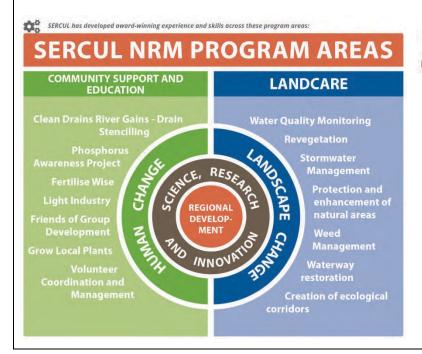
https://www.canning.wa.gov.au/our-community/community-initiatives/conservation-and-environment



The **South East Regional Centre for Urban Landcare** (SERCUL) was formed in 2003 as an independent community Natural Resource Management body in Perth, Western Australia.

SERCUL brings together the community, Local Governments, businesses, educational institutions and Government agencies to develop and implement projects that improve the health of our waterways and other ecosystems using a strategic and integrated approach.

SERCUL operates in the metropolitan and peri-urban areas of the Swan Catchment. The area covered takes in most of the southern and eastern suburbs of Perth and includes Dyarguu (the Canning River), the Southern-Wungong River and parts of Derbarl Yerrigan (the Swan River).





а

all visitors)

https://www.sercul.org.au/

https://www.facebook.com/SERCUL1

City of Canning

Examples of legislative and/or guiding policies, strategies & plans



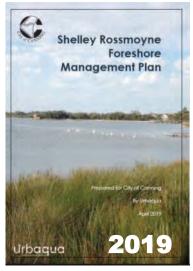




A REVISION OF THE CITY OF CANNING FORESHORE RESERVES MANAGEMENT POLICY DOCUMENT









Page 16 Shelley Rossmoyne Foreshore Management Plan

3.0 Context

As part of the development of the FMP, a review of the physical, biological, heritage, social and land use attributes of the study area was undertaken in order to determine the key issues which will be addressed by the plan. In addition, State and Local Government legislation, strategies, policies and planning documents applicable to the foreshore area were also reviewed to ensure that the plan was prepared in line with these existing documents

3.1 Strategy guidance

Management and works within the foreshore are governed by the Swan and Canning Rivers Management Act 2006 and Swan and Canning Rivers Regulations 2007. Key guidance for ongoing use and management is also provided by the Swan Canning River Protection Strategy (SRT, 2015).

Other policies of the Department of Biodiversity, Conservation and Attractions (DBCA) that are relevant to the foreshore are:

- · Planning for Land Use, Development and Permitting Affecting the Swan Canning Development Control Area (Policy 42)
- Planning for Miscellaneous Structures and Facilities in the Swan Canning Development Control Area (Policy 45)
- . Planning for Commercial Operations in the Swan Canning Development Control Area (Policy 46)
- Planning for Development Setback Requirements Affecting the Swan Canning Development Control Area (Policy 48);
- Planning for Stormwater Management Affecting the Swan Canning Development Control Area (Policy 49).

In addition, the City of Canning has a number of strategies and policies which have been and should be considered as part of the implementation of this FMP. These strategies and policies are summarised in Appendix C and include:

- · Our City, Our Future: A strategic community plan for 2017-2027
- . City of Canning Town Planning Scheme No. 40
- City of Canning Watercourse Reserves Management Strategies 2006
- City of Canning Policy ET527 Urban Revegetation and Greening 2009
- · City of Canning Water Management Strategy 2013
- . City of Canning Economic Development Strategy 2015
- · City of Canning Heritage Strategy 2015
- City of Canning Integrated Transport Strategy 2015
- . City of Canning Local Environmental Management Strategy 2015
- · City of Canning Public Open Space Strategy 2015
- . City of Canning Climate Change Action Plan 2016
- · City of Canning Policy ET525 Trees in Streets, Thoroughfares and Parks 2016
- City of Canning Local Planning Strategy 2017
- City of Canning Reconciliation Action Plan 2018
- · City of Canning Local Biodiversity Strategy 2018
- . City of Canning Cycling and Walking Plan 2018
- . City of Canning Draft Playground Provision Strategy 2018
- . City of Canning Street Tree Strategy 2018
- City of Canning Policy CM188 Naming of Parks, Park Features, Community Buildings, Recognition of Long and Exemplary Service, and Commemoration of Individuals or Events (currently under review)
- City of Canning Disability Access and Inclusion Plan 2017 2022
- . Whadjuk People Indigenous Land Use Agreement (ILUA)
- Yagan Wetland Reserve Management Plan 2000.

BEATRICE AVENUE MAIN DRAIN (BAMDKD)

Grecian's Spit

(BAMKKD empties into Canning River)





Nurdi Park 'Living Stream' Project





High Road Commercial / Light Industrial Area

Willeton Park (Apsley Road)













LEGEND

- - - Project area

BEATRICE

Current alignment of Water Corp drain

Proposed conservation style fence

Proposed pipework

Direction of flow

Planting Mix 1 - Wet

Planting Mix 2 - Ephemeral

Planting Mix 3 - Dryland

Areas with reduced planting denisty (Mix 1) and/or open water

Existing turf to be retained

9 9 Existing trees to be removed

Existing concrete pathway

Existing trees to be retained

Proposed local endemic trees

Proposed concrete path to match existing

Proposed rock riffle to living stream Proposed brush log palisades

Existing basketball court

Existing playground / toilet block and seating

Potential future bridge over living stream

Interception of low flows from existing drain and diversion to wetland

Inlet pipe with valve flow to wetland via rocky outfall providing oxygenation, precipitation and nitrification

Sedimentation basin providing sediment drop-out / removal

Removable media filter providing de-nitrification

Sub-surface flow wetland (lined) providing metal removal (Al, Cn)

Surface flow wetland (lined) providing final polishing

Paperbark grove (unlined) providing infiltration / attenuation through natural

Overflow connection to living stream

Proposed landscape bunding with select low strata native vegetation

DI PARK LIVING STREAM ICEPT PROPOSAL - NOVEMBER 2019

F PLAN SCALE 1:500 @ A1

NURDI PARK LIVING STREAM

Nurdi Park has been on the radar of the City of Canning for many years. A fenced, trapezoidal drain runs through the reserve in Riverton, which is essentially a reticulated lawn with stands of remnant paperbark. The water is nutrient rich and enters the Canning River adding to the problem of algal blooms in Summer months.

Initially, SERCUL was working with the City of South Perth to develop a project at Bodkin Park however, due to a number of reasons this project could not proceed, and the City of Canning were ready to step in with the Nurdi Park project.



This project was coordinated by Dan Friesen and now Cat Williams and aims to remove the fenced areas and open up the drain to form a more natural creek aesthetic and install erosion control measures and native plants. In addition to this a water treatment basin will be constructed, so that water can be diverted and held for nutrient stripping before being returned to the creek in an improved state.

Much time had lapsed toward the project completion deadline allowed for within this grant so the partnership has been under considerable pressure to complete all the stages of the work. To date, the basin work is approved and will commence early in the next financial year with an installation of erosion control, approximately 20 000 plants, fencing, mulching and path re-alignment.

This project is funded by the City of Canning, Water Corporation and Perth NRM Swan Canning River Recovery Program – Stage 2. The Power of Partnership



A partnership between South East Regional Centre for Urban Landcare (SERCUL), the City of Canning and the Water Corporation has led to a great project in Nurdi Park, Riverton, as part of the Swan Canning River Recovery program.

There is an inherent amount of complexity when delivering outcomes using grants, community groups, organisations and local governments – let alone a global pandemic – so with time running out for Stage Two of the Swan Canning River Recovery Program, the unforeseen cancellation of a planned project can cause a significant challenge.

With only 6 months remaining to deliver outcomes with the approved funding, SERCUL managed a cancellation challenge by taking a flexible approach, partnering with the City of Canning and the Water Corporation's Drainage for Liveability program to improve the health of the Middle Canning River by implementing a constructed wetland and living stream at Nurdi Way in Riverton.

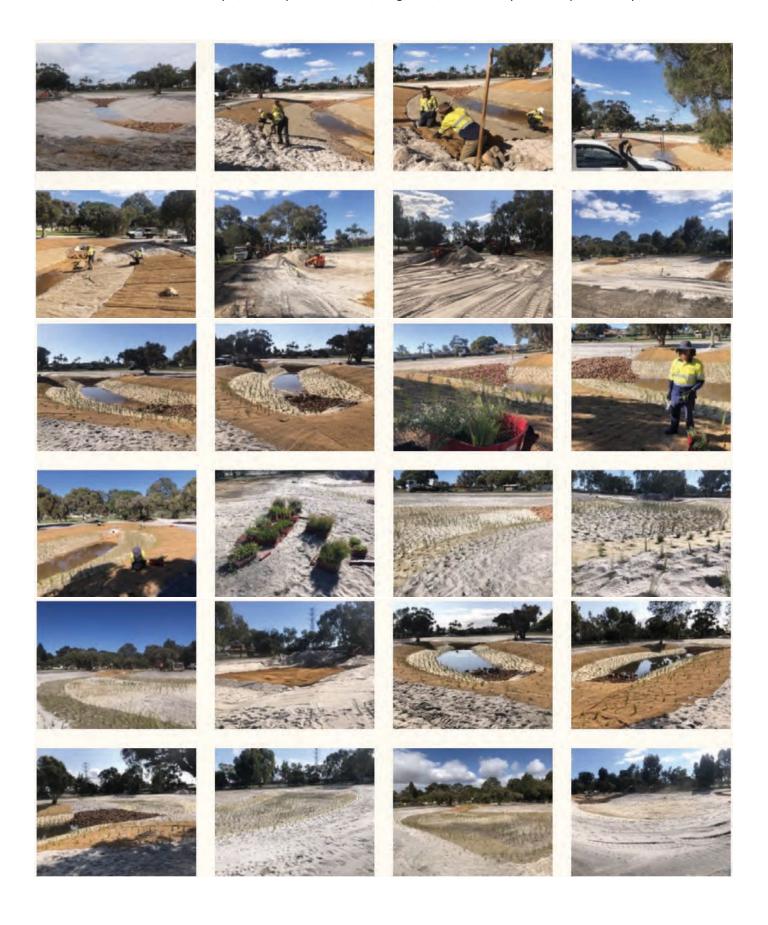
An unsightly trapezoidal drain is being converted into a living stream and constructed wetland engineered to address water quality issues, create native habitat value and improve the public amenity of essential infrastructure.

Perth NRM would like to commend the City of Canning for its outstanding effort and enthusiasm to develop a suitable project alternative within the incredibly short time-frame and its significant inkind contributions to enhance the health of the Canning River.

Quick Facts

- 250m of trapezoidal drain converted to a meandering living stream
- Over 25,000 native seedlings to be installed
- •2 rock riffles installed to improve oxygenation
- Increased riparian zone to increase nutrient stripping potential
- Constructed wetland to specifically target, treat and filter water borne pollutants
- Increased canopy and shade for park users
- In-depth community engagement and involvement

The Nurdi Way Constructed Wetland and Living Stream is being delivered and implemented by SERCUL, in partnership with the City of Canning and the Water Corporation, as part of the Swan Canning River Recovery Program Stage 2, supported by Perth NRM and funded by the Australian Government's The Swan Canning River Recovery Stage 2 is funded by the Australian Government under the Improving Your Local Parks and Environment program.



Multiple benefits from Nurdi Park - Living Stream project

by Colma Keating

Transforming an open parkland and an adjoining fenced, open drain into a living stream at Nurdi Park, Willetton, opposite the intersection of Leach Highway and Beatrice Avenue, is close to becoming a reality thanks to conversations over weeding, being in the right place at the right time and being willing to share information and work together.



Beatrice Main Drain showing start at Apsley Road, Willetton and finish at Beatrice Avenue, Shelley [Source: Water Corporation]

The Beatrice Main Drain (BAMDKD) is owned and managed by the Water Corporation. It collects road runoff and underground seepage from a large catchment that includes part of the Willetton light industrial area. Water moves in a mix of open drains, compensation basin (Roxby Lane) and underground pipes (eg Leach Highway) until it empties into the Canning River at the western end of Shelley Beach Park (Beatrice Avenue), Shelley. This final point has also become an important resting and foraging site for birds after being rehabilitated by the City of Canning (CoC) and CRREPA. It has

recently been recognised as a significant habitat area in the Shelley Rossmoyne Foreshore Management Plan.

In addition to creating a more interesting and aesthetically pleasing parkland and wetland, the living stream will also develop a natural ecological system that will aid in stripping nutrients and rubbish from the water before it enters the Canning River. The objectives of Water

Corporation's "Drains for Liveability" initiative could also be met at this site by designing and constructing a living stream, that is safe and ensures the water flow is not impacted during high flow events.



On-site meeting with representatives from Water Corporation, City of Canning, SERCUL, DBCA and CRREPA.

Cont....

The proposal brings together:

- the Water Corporation (WC), with its 'Drainage for Liveability' program brings engineering design and experience and resources;
- the South East Regional Centre for Urban Landcare (SERCUL), with its experience in streamlining and project management;
- ⇒ the CoC , with design and rehabilitation experience, resources as well as one of the most capable bobcat drivers around;
- the Department of Biodiversity, Conservation and Attractions (DBCA) design and implementation experience;
- ⇒ CRREPA with local rehabilitation knowledge and experience;
- a funding grant from the Australian Government's Swan Canning River Recovery Program (SCRRP) that was relinquished by the City of South Perth when they chose not to proceed with a project at Bodkin Park, Waterford:
- ⇒ Perth NRM which manages the SCRRP grant program;
- ⇒ the local community and schools through involvement in design and hands-on work.



An interesting side note is that both officers from WC and DBCA had contributed to SERCUL's streamlining activities, knowledge and experience before taking up their new roles. Grecian Sandwell (CRREPA's previous Foreshore Coordinator) and SERCUL's then CEO, Brett Kuhlmann (now with DBCA) dreamt of streamlining Nurdi Park in 2015. Now Stephen Johnston's role on SERCUL's Committee and his keen interest in what is happening on the opposite bank of the Lower Canning River brought together the knowledge that a streamlining grant had become available.



NURDI PARK AND BEATRICE AVENUE MAIN DRAIN (BAMDKD)

PROJECT COLLABORATION

- Water Corporation (owner of drain asset) contributed to design, permissions & budget
- City of Canning (land manager, Nurdi Park) contributed to design, installation & budget
- **Department of Conservation, Biodiversity and Attractions** (land manager were drain empties into Canning River) contributed to design and permissions
- South East Centre for Urban Landcare project manager, contributed to design and implementation, conduit to Australian Government's 'Swan Canning River Recovery Stage 2' funding grant
- Canning River Residents Environment Protection Assoc. contributed to initial concept (2015), design and hands-on volunteer effort
- Australian Government contributed to budget via grant funding 'Swan Canning River Recovery Stage 2'
- Perth NRM managers of Australian Government's 'Swan Canning River Recovery Stage 2'
- Local schools hands-on volunteer effort
- **Local community** contributed to initial design via City of Canning community engagement process and hands-on volunteer effort
- Karl Karu expertise in living stream design and management
- Syrinx environmental expertise in stream design and management.

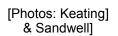


Central Ave Living Drain (Site #07a) opposite 51 Riverton Drive, Rossmoyne

(OPEN DESIGN)







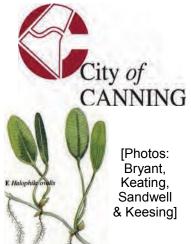






Halophila Bay (Site #23)











2012 APR

2019

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Murray's Ditch (Site #26) Living Drain opposite 235 Riverton Drive, Shelley

(FROM OPEN DESIGN 2013 to BUBBLE-UP DESIGN 2014





SIMPLE LESSONS FROM THE LOWER CANNING

Extract from: Canning River Residents Environment Protection Association (Inc.) (CREPA) & City of Canning at the WA Wetland Management Conference 2016, Bibra Lake

By Colma Keating, CREPA

Except for areas of dedicated beaches (with access to the river and grassed strips) one of our goals is to have robust natural vegetation between the walk/cycle path and the river's edge. Like all of you, so far this has taken lots of time, effort, resources, generousity and goodwill. Certainly also some moments of frustration as well as lots of enjoyment. These are some of our lessons from the Lower Canning about taking care of the people that make the difference.....

Splitting up the foreshore – for the first 8 years we worked up and down the foreshore inviting all members to each work session. Then in 2002 we split our 6kms into five sections and invited members and other locals, including residents of Riverton Drive that runs parallel to our area to five foreshore walks all held at same time. Participants got to decide which area they would join and each group then decided when they would work. We believe this met a number of needs including:

- attachment to a particular bit of the foreshore
- a spot closer to home and
- a day and time that suited participants.

This approach also shared the coordination tasks across five volunteers. For bigger weeding and planting sessions - the entire membership is invited.

One hour, tools down – a mantra for our hands-on sessions. Short and sharp sessions, letting people go back to their other lives to take kids to sport, hang out the washing, read the paper etc without feeling guilty. It took us a long time to learn this lesson. Previously we worked until the job got done and sadly lost many a future foreshore carer along the way. For our 'bigger sessions', we extend to two-three hours followed by a 'sausage sizzle' or some such. A great way to provide a simple 'reward' as well as the opportunity to 'catch up'.

Adding 'enjoyment and discovery' to corporate days is similar to the 'one hour, tools down'. Whilst many corporates offer staff for a day, we know that after a long day of weeding they may never put their hand up to help again. So one approach is to organise a morning's hard yakka followed by lunch and then canoeing upstream into the Canning River Regional Park. Again this provides some 'reward', introduces people to the wonders of our natural areas reinforcing the importance of our work and their contribution as well as makes the day more enjoyable, thus hoping they will want to return.

Moving to different sites on a corporate weeding day – another approach Sallie has found effective in reinvigorating vollies on a long day. Apart from being able to enjoy a different part of the foreshore, it is easier to clearly see what weeds are to be removed.

Doing 'stuff with fellow groups' - This time last year, as the City of Canning was to be dismantled and subsumed



Outcomes of the restoration efforts by CREPA at one of the sites along the river, 'Grecian's Spit'. Above, Grecian's Spit in 1995; below, the same site in 2014.



within neighbouring councils, we wanted to thank the staff whom we'd worked with over the years. We jointly hosted it with our fellow community conservation groups. Doing such things has been a great way to spend time with like-minded people, and has led to more sharing of information, seeking guidance, and having someone to gripe with when that is what is needed.

The power of happy snaps – thanks to all the 'happy snappers' and 'serious photographers' CRREPA has a great collection of photos that show either what we have all achieved (ie the changes on the ground) or the people involved along the way. Often those who have been in it for the long haul get a lovely reminder at what has been achieved, new folk get a surprise as they thought the foreshore vegetation was always there and members and other vollies can see their efforts are appreciated as we use pics in our newsletters, AGM slide shows as well as often in a quick e-mail post a working session with thanks and a pic or four of that day's helpers.

Nature's help along the way is certainly gained from our location. As vollies and the city staff toil away we get lovely 'philips' from river dolphins, swans, ospreys, feeding frenzies ...or just the changing light on the river.

Thanks for letting us share some simple lessons and we'd love to learn some of yours.

SUMMER 2015-2016

Page 3



Barrier Strip woodchips to chemical

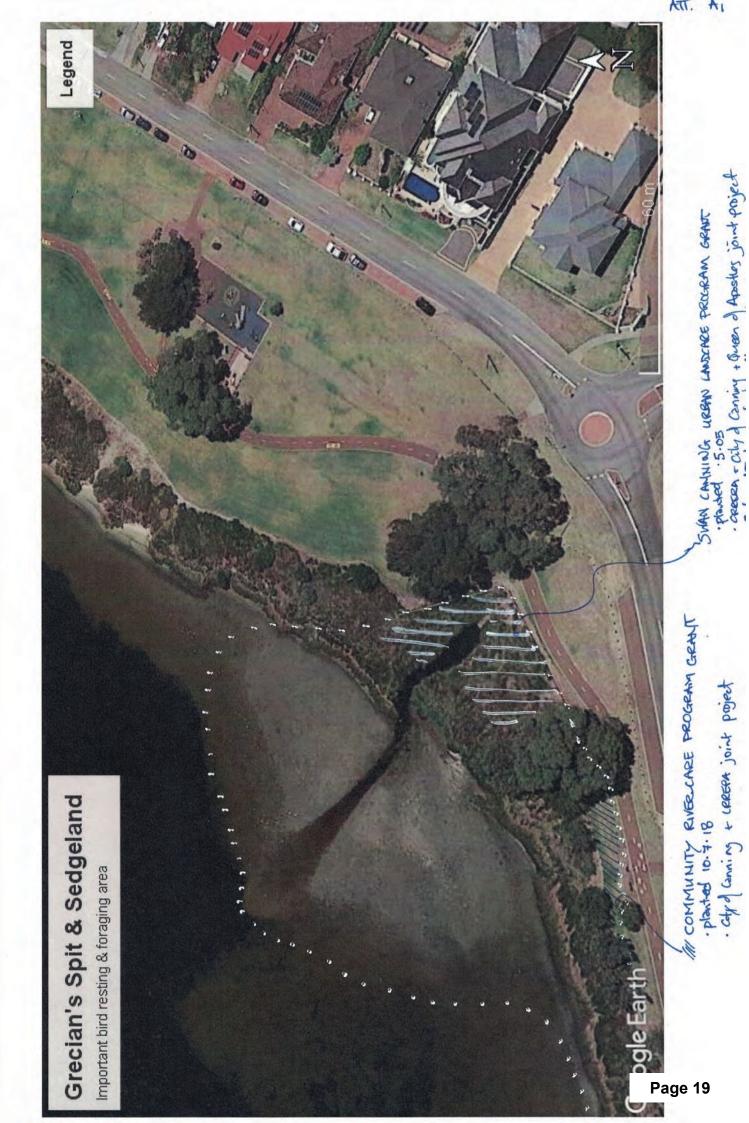




Successful maintenance of a barrier (now by CoC) so that:

- 1) parkland lawns & grasses cannot invade the sedges/natural habitat
- 2) foreshore vegetation can expand & establish further up the slope without competition.







Grecian's Spit Beatrice Ave West (Site #16)

Community Rivercare Program Grant





The City of Canning's exciting heritage trail planned for the Shelley-Rossmoyne foreshore

by Susan Harris, City of Canning interpretation consultant

"Wadjup to Gabbilju. This walk showcases the natural & cultural heritage of Wadjup-Gabbilju. There are many interpretation sign stopping-spots along the 7km route. Information about this historically shallow stretch of the Canning estuary is presented together with the reasons behind rules such as respecting native plants and not feeding birds." So reads a paragraph on the first sign proposed for the Riverton Bridge end of the City of Canning's exciting heritage trail planned for the Shelley-Rossmoyne foreshore along the path between Yagan Reserve and the LoQuay river cafe.

Interpretation is the widely practised art of showcasing heritage with the aim of conserving that heritage.

The walk takes about one and a half hours. Once the signs are in place, those wanting to spend time on the interpretation could tackle the track as a half-day excursion. Walkers can begin at either end, returning by Transperth bus to their starting point. The Yagan end is possibly the easiest for catching a bus.

The theme running through the signage is the shallowness of the Canning estuary in the area known as Wadjup. *Wadjup* is the indigenous name referring to the Canning flats. It is usually used to describe the river from approximately Riverton Bridge downriver, but appears on one map just upriver from Salter Point. It is the name of a registered Aboriginal men's site near Clontarf. *Gabbilju (Gabbiljee)* is the indigenous name referring to the Bull Creek inlet area.

A few of the interpretation stopping-spots will have several signs in a group. For example, seven signs are planned for the ablution block walls at Shelley Beach Park, and two/three signs are proposed to replace fencing at each of three jetty entrances. The stopping-spots were confirmed on an inspection visit several years ago with Diane Matthews, CRREPA President at the time.

A photographic trial run

There have been many consultative discussions with Canning River groups and individuals since the start of the project six years ago. At the photographic presentation of the signage to the City's CEO and engineering executive two years ago, Manager of Parks and Streetscapes Steve Atwell suggested the presentation could be worked up to be a geographically-sequenced photographic walk.

The following groups were each given presentations of the resulting guided audio-visual walk: the SRT/SWALSC iconic trails group, the City's Mayor and Councillors, and the CoC staff at the City's internal speakers forum. In addition there have been two publicly advertised screenings at DEC, facilitated by City of South Perth's environment and history groups (host: CoSP Historical Society). In March there was a full-length presentation for the Canning River Regional Park Community Advisory Committee. All those attending were very admiring of CRREPA's beautiful foreshore!

Over a thousand people have come into contact with the signage project in some memorable way, helping to shape its content, even if only through a brief exchange about the river while sharing a jetty. Descendants of the foreshore's historical stars and well-known cultural identities have been wonderful in their encouragement, and are happy to have their ancestors mentioned in the same breath as our bold attempt to honestly summarize the foreshore's environment through some of its triumphs and tragedies.

CRREPA is a well-known high-profile rehabilitation group with some long-term experienced conservation members, and this has made a sharpening of any effort for the project feel unquestionably worthwhile. CRREPA envisaged such a signage project years ago. The group's determined interest and historical power will help ensure that this photographic walk materializes in the ground enabling the signage to begin its conserving role.

Susan Harris will be the Guest Speaker at the CRREPA AGM at the Canning River Eco Centre on **Thursday 24th May, 2012** at 7PM. She will be delighted to answer your questions personally at supper time.

Wadjup-Gabbilju Foreshore Walk

Showcasing two estuarine parts of Dyarlgarro (Canning River).

About 7km from cafe at Riverton Bridge (Fern Road, Wilson) to Bull Creek (opp Creekview Close, Rossmoyne).

Research and design, Susan Harris, Ecomedia

Funded by City of Canning and LotteryWest Grant

Managed by the Wadjup-Gabbilju Group and City of Canning



Shelley Beach Park - 2019-08-14

(Photo: Colma Keating)



Grecian's Spit – 2019-08-14

(Photo: Colma Keating)



Birds (88) sighted along the Rossmoyne-Shelley WA foreshore (Yagan Wetland to Shelley Bridge)

		RAPTORS (5)	WATER BIRDS (45)	
		☐ Osprey	☐ Nankeen Night-Heron	
		☐ Little Eagle	☐ Great Egret	
	i,	☐ Australian Hobby	☐ Little Egret (Dec'16 STANLEY)	
	s) e	☐ Black-shouldered Kite	☐ White-faced Heron	
	o th	☐ Brown Falcon	☐ White-necked (Pacific) Heron (Mar '15)	
	ed te	LAND BIRDS (31)	☐ Australian White (Sacred) Ibis	
	эрре	☐ Fan-tailed Cuckoo (Jul'18 KEATING)	☐ Yellow-billed Spoonbill	
	pe	☐ Pallid Cuckoo	☐ Black Swan	
	can	☐ Black-faced Cuckoo-shrike	☐ Red-necked Avocet	
)ey	☐ Red Wattlebird	☐ Common Greenshank	
	to th	☐ Western Wattlebird	☐ Hooded Plover	
	34 8	☐ Rainbow Bee-eater	☐ Whimbrel (Dec'19 STANLEY)	
~	4 97	☐ Mistletoebird	☐ Black-tailed Godwit (Feb'20 LAMBE/RADESTOCH	<)
	935	☐ Striated Pardalote	□ Black-winged Stilt	
7,	00	□ New Holland Honeyeater	☐ Common Sandpiper (post '04)	
*	ian	☐ Singing Honeyeater	☐ Purple Swamphen (Aug'13)	
-	Эгес	☐ Brown Honeyeater	☐ Black-tailed Native-hen (post '04)	
3	act (☐ White-cheeked Honeyeater (post Feb'04,	☐ Pied Oystercatcher (post '04)	
3	onte	☐ Silvereye	☐ Sooty Oystercatcher (post '04)	
11	ıst c	☐ Red-tailed Black-Cockatoo	☐ Australian Reed-Warbler	
0	γ.	☐ Carnaby's Black-Cockatoo (post '04)	☐ Buff-banded Rail	
K	ngs	☐ Galah (post '04)	☐ Spotless Crake (Jun '14)	
N	ighti	☐ Western Corella (post Feb'04)	☐ Little Grassbird (post '04)	
1,	rd si	☐ Red-capped Parrot	☐ Australasian Grebe	
Z	of bi	☐ Australian Ringneck (28 Parrot)	☐ Hoary-headed Grebe (post '04)	
Ø	us (□ Welcome Swallow	☐ Great Crested Grebe (Mar'17)	
1	ontio	☐ Tree Martin	☐ Eurasian Coot	
. 7	ontributions of bird sightings. Just contact Grecian on 9354 9734 so they can be added to the list.	☐ Willie Wagtail	☐ Australian Wood Duck (Maned Goose)	
43	9	☐ Magpie-lark (mudlark)	☐ Musk Duck	
	you	☐ Australian Magpie	☐ Pacific Black Duck	
Z	nes	☐ Australian Raven	☐ Australian Shelduck (Mountain Duck) (post	'04)
	lcon	☐ Southern Boobook (post '04)	☐ Grey Teal	
	We	☐ Grey Butcherbird (post '04)	☐ Hardhead (Feb '19 KEATING/STANLEY)	
	ΞPA	☐ Rufous Whistler (post '04)	☐ Pink-eared Duck (Jul '19 SANDWELL)	
	RR	☐ Western Gerygone (post '04)	☐ Caspian Tern	
	Ö	☐ Grey Fantail (post '04)	☐ Crested Tern (post '04)	
	list	☐ Common Bronzewing (May '20 AGAR)	☐ Fairy Tern	
	t the		☐ Australasian Darter	
	ating	FERALS/ESCAPEES (7)	☐ Little Pied Cormorant	
	Updating the list: CRREPA welcomes your c	☐ Rainbow Lorikeet	□ Pied Cormorant	
	7	☐ Feral Pigeon (Rock Dove)	☐ Great Cormorant	
		☐ Laughing Dove	☐ Little Black Cormorant	
		☐ Spotted Dove	☐ Sacred Kingfisher	
		☐ Long-billed Corella	☐ Australian Pelican	
		☐ Cockatiel		
		□ Laughing Kookaburra	YOUR ADDITIONAL SIGHTINGS overleaf	

Birds recorded 1991–2020 initiated by Grecian Sandwell, member of CRREPA.

(updated 15^h June 2020)



Grecian's Spit Beatrice Ave East (Site #16)

Swan Alcoa Landcare Program Grant Queen of Apostles Primary School 2006







[Photos: Keating & Sandwell]







Another is E. camaldulensis (River Red Gum) with a pointed bud cap and a seed cup or nut that has protruding teeth when dry and open. Eucalyptus cladocalyx (Sugar Gum) can be disinguished by its rounded bud cap and smooth open nut. The River Red Gum is widely distributed and is related to our local E. rudis (River Gum). River Red Gum and Sugar Gum can drop large branches without warning.

Original Shelley Sailing Club site

The area at the bottom of Beryl Avenue is one of the first isolated Melaleuca raphiophylla trees, to increase the buffer revegetation sites carried out by CRREPA. Planting commenced in 1995. Unfortunately, soil used to fill the open beach area was contaminated with zinc, with subsequent plant deaths. tended to restore the vegetation cover to include the presently Rehabilitation is continuing. A new section was extended upstream in 2001 in partnership with students from Shelley Primary School and Rossmoyne Senior High School. It was infor wildlife and to assist in natural revegetation.

The river channel comes to the shoreline at this point. Dolphin oods have been seen here.

(10) Melaleuca raphiophylla (Freshwater Paperbark)

will notice that they are circular like a pin, not flat. This he branches provide nesting platforms. The flowers can be around our rivers and lakes. Look closely at the leaves, you species of tree can be well used by our local waterbirds. Older prolific in spring to early summer and are particularly attractrees can have hollows for nests, and horizontal forks amongst This paperbark tree is found throughout the Perth region ive to insects and accompanying birds.

TIME TO RETRACE YOUR FOOTSTEPS

Sewage Pump Station

Kings Park) where it is relayed to the Water Corporation's office in Leederville as an alarm system and for on-going statistics. Under your feet are large under-ground holding tanks This is an aerial telemonitoring system directed to Mt Eliza forming part of the Bullcreek sewerage pumping system which You may have noticed the antennae and upright metal cabinet. extends to Woodman Point at Munster. Some local overflows, nighlighted by CRREPA water testing results, necessitated the development of this warning system.

(12) Fringing Reeds and Sedges

ba Juncus grow in the water and their shape and movement suc-**a** cessfully break up wave action. This prevents loss of soil from **52** The fringing vegetation is largely composed of Juncus kraussii, an essential element in controlling foreshore erosion.

the banks and around tree roots. On the roots and become a drain.

stems of Juncus plants lives a diverse web of life erosion barrier mainly composed of Facinia nodosa animals. Without these elements our river would that supports water quality and forms part of the basic food chain. Further out of the water is the next (with little nodding heads). Their fibrous roots are turbed Juncus and Facinia beds provide essential homes and nesting areas for birds, frogs, and other excellent for holding sand particles. Healthy, undis-

Birds along the Rossmoyne-Shelley Foreshore (13)

Over the past 21 years CRREPA has recorded 74 species of birds waterbirds such as swan, cormorant (pieu, nuic pieu, nuic black, tern (crested, caspian, fairy), duck (pacific black, shelduck, musk), heron (white-faced, great, nankeen), ibis, waders come swallow and mudlark; and 6 are feral or escapees such as along the Rossmoyne-Shelley Foreshore from Bull Creek to black-shouldered kite, brown falcon, little eagle); 35 are Shelley Bridge. Of these, 5 are raptors (osprey, Australian hobby, and silver gull; 28 are bushbirds such as magpie, willie wagtail, honeyeater (singing, New Holland and brown), mistletoebird, welaughing kookaburra and rainbow lorikeet.

(For more local bird info, checkout www.canningriverbirds.com)

We very much hope you have enjoyed this short introduction to a with you an impression of the several different but interconnected small section of our foreshore. We also hope you will take away There are very few remaining sections of the Swan and Canning Rivers that retain these elements within an urbanised setting. We look forward to a partnership with you in caring for this elements that make up the bigger picture - our living river. important area

AND SHARING THE BENEFITS LIVING IN HARMONY

Line drawings of plants by Margaret Wilson https://water.wa.gov.au/_data/assets/pdf_file/0003/5628/8799-native-salineplants.pdf

Painting of Convict Fence by Sanders

CRREPA

Canning River Residents Environment Protection Assoc. (Inc.) Prepared by Diane Matthews for CRREPA November 2001 PO Box 3079 Shelley WA 6148 CRREPA@gmail.com Revised November 2015



SELF-GUIDED WALK (1)

SHELLEY FORESHORE RESERVE 出上 **RIVERTON DRIVE, SHELLEY WA** PRISONERS' POINT ON CANNING RIVER

Reserve upstream to Prisoners' Point and to the junction of This self-guided, foreshore walk takes you from the Shelley Beryl Avenue and Riverton Drive, then return. It follows a flat, well-maintained footpath with good disability access

Time: Minimum 40 minutes Distance: 700 metres

There are so many interesting features along the way, make sure you have ample time. This pamphlet is provided by the Canning River Residents Environment Protection Association (CRREPA), with the support of the City of Canning.

that the Lower Canning and Bullcreek riverine environ-CRREPA was formed in 1994 with the aim of ensuring ments are restored and conserved as healthy habitats.

As such, CRREPA's activities also benefit the enjoyment of the foreshore by present and future generations.

resting needs of the resident birds and animals. Whilst the Point is a "dogs off leash" area, all dogs must be kept under secure control at all times so as not to interfere with the enjoyment of the area by others, or to cause disturbance or stress to the local wildlife. Visitors are asked to please keep off he local community. Please respect the feeding, breeding and the fringing vegetation which is essential for the successful You are welcomed into an area that is considered "special" by management of foreshore erosion and for enjoyment of the natural features of the area

POINTS OF INTEREST

The walk commences at the jetty and the public facilities on he foreshore at Shelley Reserve in Shelley

Shelley Reserve

that these types of areas are left undisturbed as adequate bird This is the largest foreshore area available for community passive recreation within the Rossmoyne/Shelley area. City ceremonies are held here. There is an important waterbird resting area at the southern end of the Reserve. It is essential resting areas are needed if we are to have their continued functions such as New Year fireworks and multicultural companionship on our river.

It is here where we start, that we get to learn more about this

area from signs of a section of the "Wadjup-Gabbilju foreshore walk", a City of Canning project with consultant Susan Harris of Ecomedia. When completed, this informative trail will provide heritage, environment and social knowledge from near where Bull Creek enters the Canning River, to Riverton Bridge.

Jetty and Pipe Outlet

This outlet, installed in 1962 and servicing 2,000 hectares Corporation. CRREPA took water quality samples from this extending from Willetton is under the control of the Water site from 1995-2004. The Jetty was built in 2005 and is popular with children, fishers and walkers.

970s. To prevent erosion from backwash during tidal events it Proceed north along the footpath, or upstream, into the forested area of Prisoners' Point. The footpath was constructed in the s the City's policy, supported by CRREPA, to shift the athway away from the river edge to allow the foreshore vegetation to be reinforced.

Casuarina obesa (River or Salt Sheoak) Forest

The dominant natural feature of the Point is the Casuarina obesa forest. Look closely at the "leaves" of these trees. (Also refer to following paragraph re Mistletoe). They are actually not leaves but branchlets composed of tiny leaves compressed

for a tree with small pine-cone-like nuts. This it occasionally releases clouds of yellowish holds the seed in tiny valve compartments until they dry and open, allowing the seed to a magnifying lens you would be able to see the circle of tiny leaf tips at the end of each segment, and be able to count between 12-20 have separate male and female plants. Look is a female tree and the cone is a capsule that slightly sticky, female flower on the same tree or another cone-bearing tree. The male tree does not have these cones or flowers, instead into bundles arranged one after the other. With tips! Another feature of these trees is that they fall. See if you can find a tiny reddish brown, pollen from the tips of the branchlets. Carried

by the wind, hopefully some is caught by the sticky flowers so that the seeds of life can start all over again.

agrow on, however Mistletoe won't have branchlets made of bundles of tiny leaves, instead they have soft round leaves. grows into the branches of the Sheoak obtaining all its nutrients from the host tree. Mistletoes often look like the plant they While you have been searching amongst the branches you may have been confused by the Mistletoe. This is a parasite that

quite common, while another is more a shiny green. The Mistletoe has red flowers during spring and these produce berries hat are eaten by small red and black mistletoebirds. The seed in hese berries passes through the bird and is deposited onto a pranch in its droppings. This seed can then germinate and grow Look for two different types - one is grey/blue in colour and nto the host tree – and everything starts all over again!

Keep a look out for two pretty butterflies that also visit the Mistletoes. Amorilas azore is a small blue butterfly and the spotted Jezebel is white and black with brilliant splashes of red and yellow. The butterfly's caterpillars live on the Mistletoe plant and help to control its spread. The Sheoak is a focal element of our riverscape. It is important in bird roosting and preening. Its soft shape and grey/blue foliage act as important wind deflectors for nearby housing and walkers and provide welcome shade and relief from water glare during the snags and root shelter for fish habitat, and drooping branches for riverbank ecology, providing shade for tiny river organisms, hotter months.

Melaleuca cuticularis (Saltwater Paperbark)

These trees tolerate waterlogging and salt in the soil or air. It usually occurs nearer the water than some of the other types of Look for the distinctive star-shaped fruit that hold tiny seeds. Amongst the Casuarinas are some paperbark trees or shrubs.

riverine trees. Their position in this landscape shows that the Point has been shaped and modified by dredging-spoil placed onto the area in the past. Towards the road (Watersby Crescent) you will notice two specimens that are isolated in the grass area. If you look closely you will

discover that they are almost devoid of seed capsules. This would are not able or willing to cross the open space. These plants are quite old and their genetic heritage, direct descendants of many housands of years of continuous reproduction in this area, is group (CRREPA) collects and grows seed from our local plants ikely to be coming to an end. The local rivercare/catchment seem to indicate that the necessary pollinators (bird or insect?) and these are then placed back into the foreshore areas.

The Saltwater Paperbark tree is usually a shrub in this region. Its rregular shape has great character and it carries abundant white flowers in the spring.

Shelley Sailing Club 9

The Sailing Club, whose season runs from October to April, was formed in 1974 as a local family sailing club. The original aunching area was at the bottom of Beryl Avenue on Riverton Drive and the present Club House is an extension of an earlier starting box and storage area.

PRISONERS' POINT AND THE FISHING JETTY. CONTINUE ALONG PATH TO OTHER SIDE OF

Watch for nesting willie wagtails

Fishing Jetty 6

mainly by people fishing, the City of Canning in consultation with the Department of Fisheries and RecfishWest built fishing letties in 2005 to provide platforms that are both safe for people and protective for shoreline and sedges. The Swan River Trust, Rossmoyne Senior High School Bush Rangers and In response to the unfortunate damage of the important shoreline vegetation (particularly reeds and sedges) caused CRREPA helped with rehabilitating these areas.

The Convict Fence

From the jetty you can see posts sticking out of the water. The original "fence" constructed by convicts in 1866, was to provide a silt free route to allow the passage of timber hauling These barges were poled to meet steam-boat tugs at Mt Henry then to proceed to Fremantle Port. Original construction was of 'stakes and wattling" including Jarrah poles backed by Casuarina trees, felled on nearby banks. The tops of the poles barges from Mason & Bird Timber Co at Mason's Landing. were linked by 4 x 4 inch planking of which none remains.

Below water many of the SANDERS

piles are remarkably sound and still show axe marks. Once the fence was constructed, convict labourers worked in the waist deep water and shovelled silt over fence to behind

'wattling" to form a channel. It is recorded that application was made by their supervisor for extra food and tobacco rations. It was argued that extra nourishment was needed by the men as they were voluntarily forgoing their tobacco ration and trading it for extra food rations. A major reconstruction was undertaken by the Public Works Dept. in 1892 with work again being performed by prison labour.

(8) Collection of Eucalypts

you will have noticed the various large Eucalyptus trees edging the pathway. They were planted when the pathway was first installed. Look for the different bud caps and seed carrying nuts. The large, open spreading tree with exposed roots and While you have been discovering this side of Prisoners' Point with a bench beneath, is Eucalyptus gomphocephala (Tuart) and naturally occurs nearer the coast on limestone soils.



Ecological Linkage & Woody Habitat (309 Riverton Dr, Shelley)







[Source: Google Earth]

Above: Remnant vegetation on private property provides important habitat and ecological linkage. These 10-12 mature trees (Paperbarks & Flooded Gums) were removed for subdivision and development.

<u>Below</u>: Following negotiation, the trunk and stems of the last *Eucalyptus rudis* (Flooded Gum) felled were relocated to the foreshore for habitat.

CRREPA acknowledges the demolition company and City of Canning for their contributions to this ecological salvage.









[Photos: Radestock, Stanley & Keating]



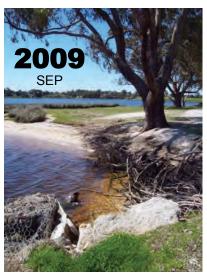
Wadjup Point West (Site #12)

EROSION + HARD ENGINEERING















[Photos: Keesing, Keating, Sandwell & Stanley]





Wadjup Point West (Site #12)

EROSION + HARD & SOFT ENGINEERING incl gabions, brush matting, sand replenishment









Canning River Residents Environment Protection Association

5 November 2020 · 🕢

Wadjup Point restoration work nearly complete - just some plantings to go. Thanks to the City of Canning for promptly arranging the remediation. The next big task for this area is to educate the public to stay off the eastern end of the beach which is a resting site for many of the shorebirds including the endangered Fairy Terns. We have had little success in the past as signs have been torn down or ignored. Tonight, even with the whole area fenced off, the public have climbed over rocks to use the beach.





Wadjup Point East (Site #12) Living Drain opposite 355-357 Riverton Drive, Shelley

(BUBBLE-UP DESIGN and EXTENDED REVEGETATION)



