

# Science & Waterways Project REPORT



PHCC General Meeting – 21 February 2019

Steve Fisher, Program Manager, Science & Waterways

## **RLP – Wetlands and people: A community restoring the ecological character of the Peel-**

### **Yalgorup Ramsar 482 Wetlands (The Ramsar Project)**

**Nov 2018 – June 2023 \$4,996,221**

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#### **Science and Collaborative Management**

- Recruited and appointed Rick James as Coordinator, Wetlands Science and Management (Nov 2018)
- Organising the Ramsar Technical Advisory Group meeting scheduled for 14 March 2019.
- Preliminary scoping for a specification for the updates (addenda) to the Ecological Character Description and the Management Plan for the Peel-Yalgorup System
- Commenced discussions and negotiations with key stakeholders (DWER and DBCA) regarding monitoring programs to better understand the hydrology of Lake Clifton

#### **Wetlands & People (Community Engagement)**

- This component is managed by Sharon Meredith Coordinator, Ramsar Community Engagement
- Organised a successful Shorebird 2020 Count (10 February) which involved facilitating shorebird identification workshops for volunteers through Ornithological Technical Services (18 January), and coordination of a program involving more than 60 volunteers split into 20 teams across the Ramsar Site.
- Negotiating with Mandurah Performing Arts Centre to produce a soundtrack to the “Wetlands from Above” feature film, show-casing the natural assets of the Ramsar Site.
- Coordinating an 8-minute preview of “Wetlands and Above” film to be showcased at Performance of the Planet in Perth (27<sup>th</sup> March), Perth Symphony Orchestra will provide a live musical performance.
- Organised the Stints are Rad incursion to John Tonkin College (5 February) with Milly Formby introducing students to the importance of our Ramsar Site to migratory shorebirds, and teaching shorebird identification skills.
- On-going planning and coordinating of 12 community engagement and education events to deliver by June 2019, the next being the Clean-up Peel Waterways Workshops in Pinjarra and Mandurah on 22 February as preludes to the Cleanup event itself throughout March.

#### **On-Ground**

- Recruited and appointed (13 February) Mike Griffiths as the Wetlands Restoration Officer to deliver this component. Mike is currently working in Kalgoorlie with as the Ranger Coordinator at Goldfields Land and Sea Council. He will commence with PHCC on 11 March.
- In the interim, Rick has identified some target areas for weed control, feral animal control and revegetation across the five years of the project; summarised the tasks to be completed by June 2019 as project briefs, prioritized these, and prepared the way for Mike to implement.
- After all of this planning, the first of the on-ground actions, weed control in Kooljerrenup Nature Reserve, is currently underway (this week).
- The contract for the Lake Mealup Bushland Action Plan to be awarded during week commencing 25<sup>th</sup> February (Request for Quote prepared and submissions from contractors received).
- Rick, Jo Garvey and Jesse Rowley attended the 2019 Wetland Management Conference (1 February)

## **Alcoa Foundation: Connecting Corridors and Community: Restoring the Serpentine River**

**Oct 2017 – Oct 2020 US\$ 750,000**

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- Community Engagement Grants round generated interest from 14 landholders. Of these, eight projects were recommended for funding of which five applicants proceeded with Agreements totaling \$46,064 (plus ~\$20,000 pending Agreement finalisation). In-kind contribution from Applicants exceeds \$50,000.

- Renowned botanist, Bronwen Keighery provided training in performing native vegetation assessments and plant identification for PHCC staff, Local Government representatives and Alcoa staff. The training was conducted over two days (10 & 11 December 2018) including a theory session followed by a practical exercise at Lowlands Nature Reserve.
- Negotiating with Urbaqua (Helen Brookes) to complete a River Action Plan (RAP) for the Serpentine River downstream from Lowlands. Rather than perform as a fee for service, Urbaqua will enter into a partnership agreement with PHCC where our staff and interns from Alcoa will assist with the field work and receive training in developing the RAP.
- Supporting Landcare SJ to develop a strategy for removal of water hyacinth. In preparation for the RAP, we completed an aerial survey of the Serpentine by helicopter which is useful in identifying areas of water hyacinth infestation.
- With assistance from DWER, developed a request for quote to undertake River Health Assessments on the Serpentine River and circulated to the (only) two service providers, Murdoch University and Wetland Resource Management (18 February).

### **Royalties for Regions: State Estuary Grants**

**Jun 2018 – Sep 2021 \$750,000**

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- Managed by Jo Garvey supported by Jesse Rowley
  - Contracted Harvey River Restoration Taskforce (November 2018) to implement Harvey River Demonstration Reach project (\$150,000) and River Health Assessments (\$20,000).
    - River Health Assessment field work (aquatic biota theme) co-funded by Alcoa Foundation (\$25,000) via Greening Australia completed by Murdoch University (Nov 2018)
    - Urbaqua subcontracted to perform a survey of societal values of the Harvey River
  - Contracted Murdoch University to undertake Stock Enhancement of black bream in the Murray River project including set up of an aquaculture facility at John Tonkin College.

### **Royalties for Regions: 1FTE Science Advisor**

**May 2018 – Oct 2021 \$345,000**

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- Managed by Steve Fisher
  - Completed annual progress report for *Science Integration* project, the forerunner to the current project, to satisfaction of DPIRD (16 January)
  - Supporting The Nature Conservancy (TNC) with organisation of a two-day workshop to develop a Conservation Action Plan for the Peel-Harvey Estuary (to be held in Mandurah, 19 & 20 March). This clearly links to the update of the ECD, the Management Plan and Report Card for the Ramsar Site.
  - Completed or scheduled the following speaking engagements all of which link to delivery of the Ramsar Project:
    - Yet to be aired interview with ABC Radio 720 (Afternoons with Gillian O'Shaughnessy) describing the ecological character of and threats to the Lake Clifton thrombolites. There is an opportunity to extend this into a series of segments for radio and perhaps television.
    - Lecture to the Mature Aged Learning Association (Peel) on 9 January as a guest speaker at their summer school. The presentation, Watery Science: Caring for our Ramsar Wetlands of International Importance was attended by approximately 60 people.
    - Presentation to Dolphin Watch trainees (27 March) on geomorphology, values of, and threats to the estuary

### **State NRM: Saving :Lake McLarty Phase 1: \$350,859**

**March 2019 – June 2021**

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- Contract yet to be finalised: first step is to revise the work plan to fit the amended budget (requested \$351,859, awarded \$350,859)

## **1. Events (January to April 2019) (and/or PHCC sponsor or presenting)**

17 January	Shorebird Identification Workshop (PHCC Event)
5 February	Stints are Rad (Citizen Science Incursion)
10 February	Shorebird 2020 Count (PHCC Event)
22 February	Clean Up Peel Waterways Workshops (Pinjarra and Mandurah)
1 – 31 March	Clean Up Peel Waterways Month
5 March	Cockatoo Count training (BirdLife WA, sponsored by PHCC)
13 March	Ramsar TAG (PHCC Event)
19 & 20 March	Conservation Action Planning workshop (supporting through 3 Rivers 1 Estuary)
27 March	Dolphin Watch Training (PHCC presenting and co-sponsoring)

## **2. Work Health Safety**

There are no incidences to report



# Connecting Corridors and Communities



PHCC Working Together  
Peel-Harvey Catchment Council

## Restoring the Serpentine River

Edition 2  
December 2018

Welcome to the second edition of *Connecting Corridors and Communities* - an update on the project and on Natural Resource Management (NRM) in our Peel-Harvey Catchment. NRM refers to the management of natural resources such as land, water, soils, plants and animals. It brings together landuse planning, water management, biodiversity conservation and the future sustainability of industries such as agriculture, mining, tourism, fisheries and forestry.

### Serpentine Community Comes Together

On October 13, PHCC hosted a Community Forum where stakeholders and landholders came together to share stories about the Serpentine River. This included listening to our *Three Rivers, One Estuary Initiative* partners Greening Australia and The Nature Conservancy, as well as the City of Mandurah, Local Noongar Elder Harry Nannup and

some local Serpentine landholders. We were lucky enough to have Uncle Harry give an insight to what life was like growing up on the Serpentine and how much it has changed over most of his life. Other presenters shared valuable information about their individual projects occurring not only along the Serpentine, but also in the Murray and

Harvey river systems. It is through these conversations that we can appreciate the values of, and learn the true keys to success to improving the health and biodiversity of our rivers including the Serpentine. At the end of the workshop, we assisted interested landholders in applying for our Community Environment Grants.



### People Working Together to Save Our Serpentine

Over the past month, our Rivercare team has been extremely busy visiting landholders across the Serpentine River sub-catchment as part of the 2018 Community Environment Grants Program. Through this program, PHCC has made \$160,000 dollars available to landholders to assist with their projects that will lead to an improvement in condition of the Serpentine River. We had 14 expressions of interest from landholders who live directly adjacent to the Serpentine River who

are keen to help improve the health and biodiversity of this river system.

Where possible, officers visited each landholder on their properties to help them plan their projects and assist with applications. Eight applications were assessed by our Independent Assessment Panel and we are now finalising successful projects. Each of the successful projects will undertake and deliver a range of on-ground activities, including revegetation,

bank stabilisation, fencing, enhancement of fish habitat, weed control and feral animal control.

These activities will greatly improve the ecological health of the Serpentine River and surrounds through reconnecting bushland and riparian zones, protecting and conserving existing vegetation, improving water quality and providing food and habitat for native fish species and other fauna.





# Connecting Corridors and Communities

Restoring the Serpentine River

## NRM Receives Training from Renowned Botanist

Earlier this month, partners and stakeholders took part in an *Introduction to Native Vegetation Assessment* training with renowned expert botanist Bronwen Keighery. Bronwen has a passion and love for local wildflower species in WA. Through her career, she studied botany and zoology, taught biology, researched vegetation and flora of the Swan Coastal Plain and applied these studies (and others) to the Conservation Plan for Perth (Bush Forever). She has been involved in multiple not-for-profit and community organisations such as the Wildflower Society of WA. Bronwen now works as a consultant botanist and volunteer.

The training ran over two days: Day One involved a master class on how to correctly

perform a vegetation assessment. On Day Two we put our skills to the test on how to correctly perform a vegetation assessment at Lowlands Conservation Reserve. This site was chosen as a test site because several botanical studies have been undertaken there against which we could compare our results. It is also the reference site for our Alcoa Foundation project.

With people from various organisations, including Alcoa team members, it gave the opportunity to share and exchange vital knowledge in vegetation assessment and best practise methodology. We look forward to taking learnings and implementing them into our upcoming projects.



## Planting Success for Local Landholders Farm



PHCC, local landholders and the not-for-profit group Growing Towards Wellness recently came together just down stream

of Lowlands Reserve to plant 1000 *Lepidosperma persecans*, a riparian sedge that naturally occurs in our region and forms a major part of the understorey along the Serpentine River. It is no secret that western grey kangaroos love to eat this species for supper, therefore seriously impacting the establishment of these plants.

Potential sites were inspected prior to commencing planting to ensure this species had a chance at growing to full capacity. The sites chosen are protected from kangaroos and livestock through a fenceline that runs adjacent to the river that includes the surrounding riparian bushland.

The landholder is also currently working with the Dept of Biodiversity, Conservation and Attractions and volunteers to estimate kangaroo numbers to inform future management strategies. Once these plants establish, they will create shade and habitat for other fauna species as well as having the ability to displace weed species in the area.

## What's that bug?



PHCC officers Rick James and Jesse Rowley recently took part in *WaterBug Identification Training* as part of the National WaterBug BioBlitz led by renowned freshwater ecologist John Gooderham. The team learnt how to correctly sample and identify macroinvertebrates within river and estuarine systems.

This training will be put into action in autumn when River Health Assessments get underway to help determine the health of the Serpentine River. Macroinvertebrates are key indicator species of river health that respond to contaminants such as metals, pesticides, bacteria and nutrients and threatening process such as increasing salinity and decreasing flows.

We would like to wish our Community, project partners and volunteers a safe and Merry Christmas. We look forward to continuing to work with you all in 2019.

Please note: Our office will be closed from 21st December and will re-open on the 7th of January.



This project is supported by the Peel-Harvey Catchment Council through funding from the Alcoa Foundation's *Three Rivers, One Estuary Initiative*. Alcoa Foundation: Investing where Alcoa has a presence, partnering with communities to address local needs in a sustainable manner. With our nonprofit partners, we contribute to environmental excellence, economic success and social responsibility around the globe.

[www.peel-harvey.org.au](http://www.peel-harvey.org.au)

