# Connecting Corridors and Communities Restoring the Serpentine River

# \$750,000 USD

# December 2018-2020 (3 yrs)

Through a collaborative approach to improve the health, biodiversity, ecosystem function and ecosystem services of the Serpentine River and the estuary, the Peel-Harvey Catchment Council (PHCC) will work with local community, focusing on private landholders and the Noongar community, to improve the health of bushland and riparian zones as well as connectivity and function of these zones to improve water quality, habitat, breeding and food resources for native species.

The proposed works complement other initiatives in which PHCC is involved in partnership with State Government: the Regional Estuaries Initiative and the Transform Peel Program, both focused on improving the water quality of the Peel-Harvey Estuary and in particular the Serpentine River and catchment.

The proposed initiative will aim to link significant Noongar (local aboriginal) sites and private landholders works with existing restoration projects undertaken by government agencies and community groups. It aims to bring all parties together to share knowledge and experiences and to identify opportunities to develop a continuous wildlife corridor along the Serpentine River and its receiving water bodies. By doing so it aims to "fill the gaps" and implement on-ground activities that minimise biosecurity impacts on existing bushland and riparian zones while improving native vegetation connectivity.

Alcoa Foundation will also fund two additional environmental projects across the Peel-Harvey Catchment. The partnerships with Greening Australia and The Nature Conservancy will help deliver onground and in-water environmental actions.

### **OUTCOMES**

- Improved ecological health of the Serpentine River and surrounds
- Increased community environmental and cultural knowledge, awareness and capacity
- Increased vegetation connectivity to improve aquatic, riparian and terrestrial habitats
- Enhanced relationship with the Noongar community including the provision of skills and training for future employment opportunities
- Increased stakeholder networks and connections
- Increased knowledge and capacity of private landholders, groups and organisations to deliver projects
- A River Action Plan for the mid and upper reaches of the Serpentine River to guide future restorations actions
- Mitigate impacts of climate change –
   vegetation along a waterway provides nutrient
   stripping potential, shade to reduce water
   temperature and evaporation which in turn
   increases dissolved oxygen levels







## **OUTPUTS**

Here we propose improving the health, biodiversity, ecosystem function and ecosystem services of the Serpentine River through collaboration with private landholders and the Noongar community by engaging the following on-ground activities:

- Community engagement events and field days
- **Fencing** Protect and conserve existing areas of riparian and bushland vegetation to maintain resilience in the landscape
- Revegetation Reconnect areas of bushland, riparian zones and/or patches of remnant vegetation to create landscape scale ecological corridors
- Bank stabilisation to improve water quality and provide food and habitat for native invertebrates and finfish
- Biosecurity management Feral animals, weeds and diseases will be removed to reduce impact and spread with the aim to improve ecological function
- Consult and engage the local Noongar community through all aspects of the project
- Develop a **River Action Plan** for the mid and upper reaches of the Serpentine River to guide restoration actions
- Measurement and evaluation of the activities using River Health Assessments, Ecological Monitoring and surveying of participants

