

#### OUTCOMES

- Baseline and reference for on-going condition assessment to measure the effectiveness of works established for Bilya Maadjit (Murray River) through updating of River Action Plan and undertaking River Health Assessments at 2 additional sites, building on existing data sets.
- Increased cross-cultural knowledge though
  engagement with local Bindjareb Noongar Commur
- Increased community awareness and capacity for landowners and Bindjareb Noongar community to undertake activities to restore the biodiversity of the rivers.
- Improved management and condition of riparian and terrestrial areas of the river corridors that can continue to be built on through future programs and funding.
- Paving the way for the establishment of a demonstration site to showcase trials, challenges and successes of restoration activities in the Serpentine River Corridor.

## FUTURE ACTIVITIES

PHCC plans to continue restoration activities within the corridors of the Bilya Maadjiit (Murray River) and Waangaamaap Bilya (Serpentine River), guided by the priorities of the River Actions Plans and continue to monitor the ecosystem health of these important river systems.

## VOLUNTEERS

Alcoa Staff, Community Volunteers.

PUBLIC AWARENESS

Social Media, PHCC E-News, Media Releases, Newspaper Advertisements, Films, Conference Presentations, Peel Magazine (PDC Publication).

#### COLLABORATION

The project is undertaken as part of Alcoa Foundation's "Three Rivers, One Estuary Initiative" in collaboration with The Nature Conservancy and Greening Australia.

#### LINKS TO OTHER PROJECTS

The Healing Bilya Project has added value to and received contributions from other PHCC projects, including the "Peel-Harvey Estuary Grants" (Western Australian State Government); "Wetlands and People – a community restoring the ecological character of the Ramsar 482 Wetlands" (Australian Government).

# CASE STUDY 50 2020-2023



# Healing Bilya Restoring the Murray and Serpentine Rivers

The "Healing Bilya-Restoring the Murray and Serpentine Rivers" project is a continuation of the Alcoa Foundation's investment for the overarching "Three Rivers, One Estuary Initiative" and the Peel-Harvey Catchment led project "Connecting Corridors and Communities-Restoring the Serpentine River". The project area was expanded to include the Bilya Maadjit (Murray River) and was developed to improve the ecological health of the

#### FUNDING PROGRAM

Alcoa Foundation

PHCC PROGRAM Science and Waterways

#### PHCC PROJECT

Healing Bilya – Restoring the Murray and Serpentine Rivers

FUNDING

Alcoa Foundation

USD \$600,000

#### IN KIND CONTRIBUTIONS

Urbaqua (in-kind) - \$22,600 AUD for development of Bilya Maadjit (Murray River), On-ground works delivered in partnership with and contributions from Private Landholders, Shire of Murray, Department of Water and Environmental Regulation and Department of Biodiversity, Conservation and Attractions.

#### **PROJECT MANAGERS**

Johanne Garvey, Jesse Rowley, Renée Barton



Murray and Serpentine Rivers and surrounds. Through collaboration with private landholders, Bindjareb Noongar traditional owners and the broader community, onground works identified through River Action Plans have been implemented to improve the ecological health and condition of the river corridors. Knowledge and capacity within the local community has also increased through a variety of engagement and training events and activities.

## STEERING COMMITTEE

Bob Pond, Marilyn Gray, Rob Summers, Mark Cugley

## STAKEHOLDERS

Private and public land managers, Winjan Aboriginal Corporation, Bindjareb Community, Department of Water and Environmental Regulation, Department of Biodiversity, Conservation and Attractions, Shire of Murray, Murdoch University, Urbaqua, Community Groups, Alcoa and Community Volunteers, Local Schools (John Tonkin College, St Joseph's Primary School, Pinjarra; Carcoola Primary School, North Dandalup Primary School, Greenfields Primary School)

## BENEFICIARIES

Private and public land managers, Department of Biodiversity, Conservation and Attractions, Western Australian Planning Commission, Shire of Murray, Bindjareb Community

## REGIONAL COVERAGE

Ramsar Wetlands

Coastal Plain

## LOCATION

The Bilya Maadjit (Murray River) is the largest river in the Bindjareb Djilba (Peel-Harvey Estuary) Catchment with its sub-catchment encompassing approximately 8,300 km<sup>2</sup>. The Waangaamaap Bilya (Serpentine River) has a smaller catchment area of 664 km<sup>2</sup>. Together with the Harvey River, the rivers are fed by a network of more than 4,000 km of smaller streams, the vast majority (> 99%) of which are in a degraded condition due to poor land use planning decisions. All three rivers drain directly into the Bindjareb Djilba (Peel-Harvey Estuary), part of the Peel-Yalgorup Wetlands recognised under the Ramsar Convention as a wetland of international importance (Ramsar Site 482).



## KEY DELIVERABLES Community Engagement

 6 events/workshops and 6 field training days held to increase skills and knowledge of local community with over 1200 participants.

## Noongar Participation

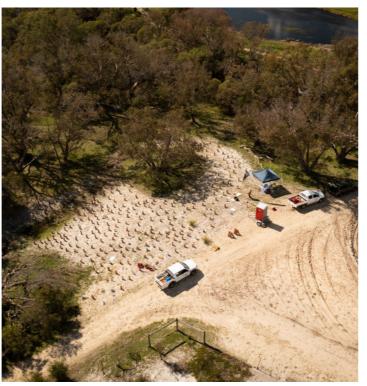
- 10 consultations and cultural knowledge sharing activities with Elders, Bindjareb leaders and community.
- 12 activities engaging and training 11 Winjan Bindjareb Boodja Rangers in restoration works including weed control, revegetation, fauna and vegetation monitoring, maintenance and seed collection.

## **On-ground Activities**

- Bilya Maadjit (Murray River) Action Plan reviewed and updated to inform on-ground works priorities.
- >2250ha managed for biosecurity threats including feral pigs and weed control.
- >30ha riparian and bushland corridor areas improved through restoration activities to improve the condition, connectivity, and biodiversity of habitat.
- >21,000 seedlings planted across revegetation projects.
- 10 rubbish removal events held and annual community wide 'clean-up' month supported.
- 4.9km of fencing installed to protect waterways and facilitate natural regeneration.
- 4 landholders engaged in in-stream restoration and habitat enhancement.

## Monitoring and Evaluation

- 6 River Health Assessments completed at 3 Sites on Bilya Maadjit (Murray River).
- 4 Ecological Vegetation Monitoring sites established and maintained.
- 2 Fish Community Index Surveys completed for Bindjareb Djilba (Peel-Harvey Estuary) including Bilya Maadjit (Murray River) and (Waangaamaap Bilya (Serpentine Rivers).









We will use the River Action Plans to guide us in our future restoration works for the Serpentine and Murray rivers. By setting a baseline for the current condition of the river, the plans will enable us to measure the improvement in river health as a consequence of our actions. Improvements in condition of the Murray River will also complement PHCC's efforts in protecting the values of the Peel-Harvey Estuary. The Estuary is a major component of the Peel-Yalgorup Wetlands System, recognised under the Ramsar Convention as a Wetland of International Importance due to the habitat it provides for waterbirds including migratory shorebirds, fish and invertebrates and threatened ecological communities"

~ Caroline Knight, PHCC Chair ~