Australian Government
Commonwealth Environmental Water Holder

# View from the CEWH

## Partnerships, progress and persistence

River Reflections
19 June 2024

Dr Simon Banks
Commonwealth Environmental Water Holder

Dharriwaa (Narran Lakes)
Photo: Dr Kate Brandis, UNSW

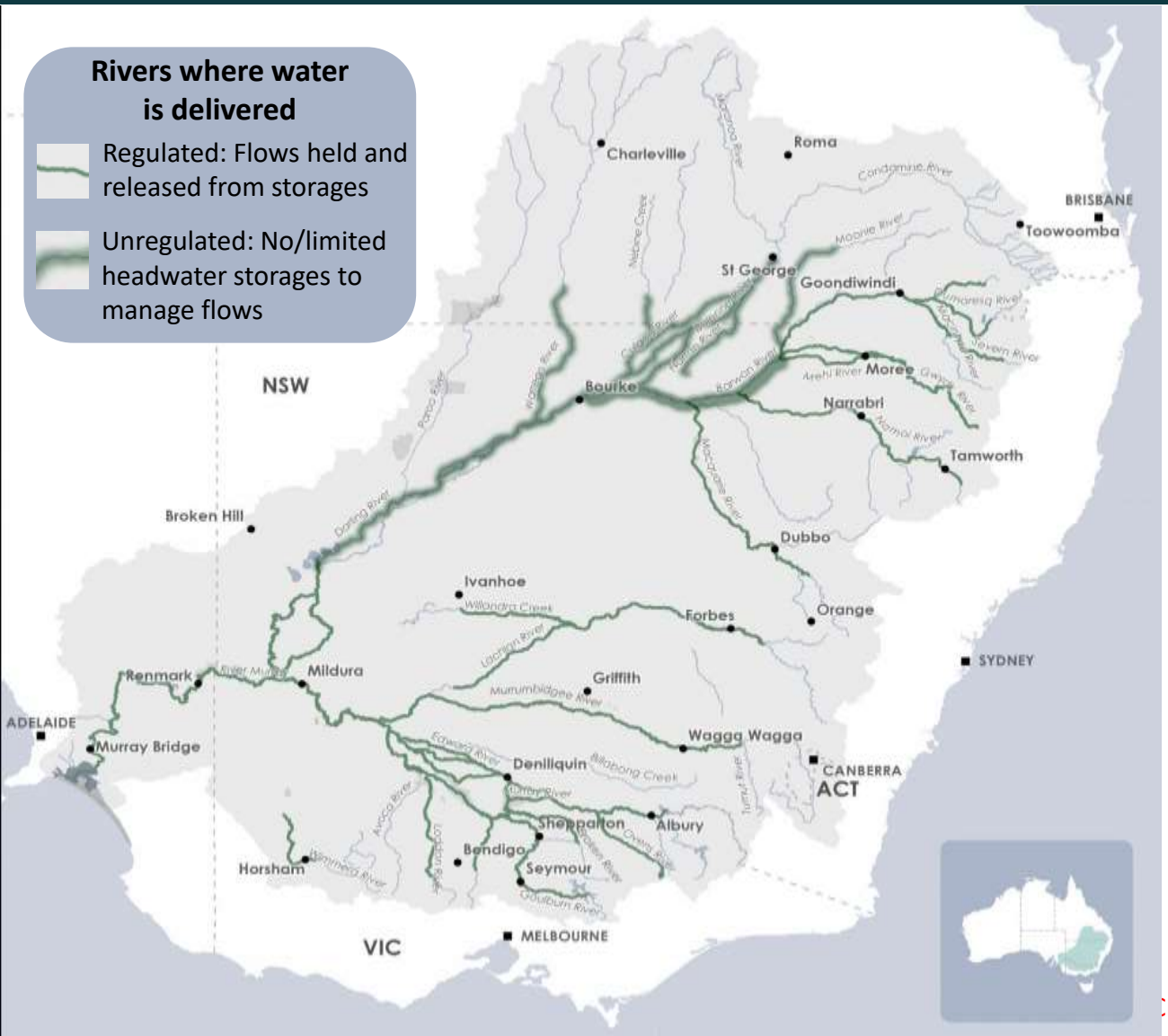
We acknowledge the Traditional Owners of Country throughout Australia and recognise their continuing connection to land, waters and culture. We pay our respects to their Elders past and present.

Artist: Commonwealth Environmental Water Holder staff, under the guidance of Rebecca Salcole

# Overview

- Role of the CEWH
- Water use and activities
- Partnerships
- Progress
- Persistence
- Key issue to address

# Commonwealth Environmental Water Holder




Huge public asset

- ~2033 GL of water/yr (long-term diversion limit equivalent)
- 124 entitlement types across 19 catchments

Complex environment

- 1 million square kilometres
- 4 states and a territory
- More rules and regulations than any other

Significant impact

- Flows to 26,000 km of Basin waterways
- Almost 16,500 GL delivered since 2009 (33 Sydney Harbours of water)
- Inundated 420,000 ha of freshwater habitats
- Support 11 internationally significant wetlands

Informed by monitoring and science, experiences and knowledge

# Use of water for the environment in 2023-24

**Macquarie Marshes**
Photo: DCCEEW

This year we used water for the environment to support:

- waterbird feeding habitat
- native fish breeding and movement
    - connecting flows between rivers, particularly in the northern Basin and down the Darling-Baaka
    - mitigate poor water quality
- aquatic, riverbank and wetland plant condition and re-establishment
- threatened species including the southern bell frog, Murray hardyhead, Australasian bittern and regent parrot
- flushing of salt from the River Murray.

# Now planning 2024-2025

## We plan for a range of scenarios

| **CONDITIONS** | VERY DRY | DRY | MODERATE | WET TO VERY WET |
|---|---|---|---|---|
| *Aim of watering* | ***Protect*** | ***Maintain*** | ***Recover*** | ***Enhance*** |
| | • **Avoid critical loss**<br>• **Maintain key refuges**<br>• **Avoid catastrophic events** | • **Maintain river functioning**<br>• **Maintain key functions of high priority wetlands** | • **Improve ecological health and resilience**<br>• **Help plants and animals breed, move and thrive** | • **Restore key floodplain & wetland linkages**<br>• **Help plants and animals breed, move and thrive** |

# We use different water management options

## DELIVER

Deliver water to meet identified environmental demands

## CARRY OVER

Carry water over for use in the next water year

## TRADE


Trade (sell or buy) water for equal or greater environmental benefit

or fund
**environmental activities**

# Carrying over Commonwealth environmental water

- An essential management option
- Used by both irrigators and environmental holders
- We all follow the same rules
- Our carryover is a small percentage of storage in dams
- Similar use of carryover as irrigators

| 2013-2022 | Irrigators | Environment water holders |
|---|---|---|
| Average carryover of available water | 30% | 28% |
| Carryover as percentage of public storages | 27% (yellow drops) | 8% (green drops) |

# Trade and environmental activities

## Tea gardens fishway project

Before

After









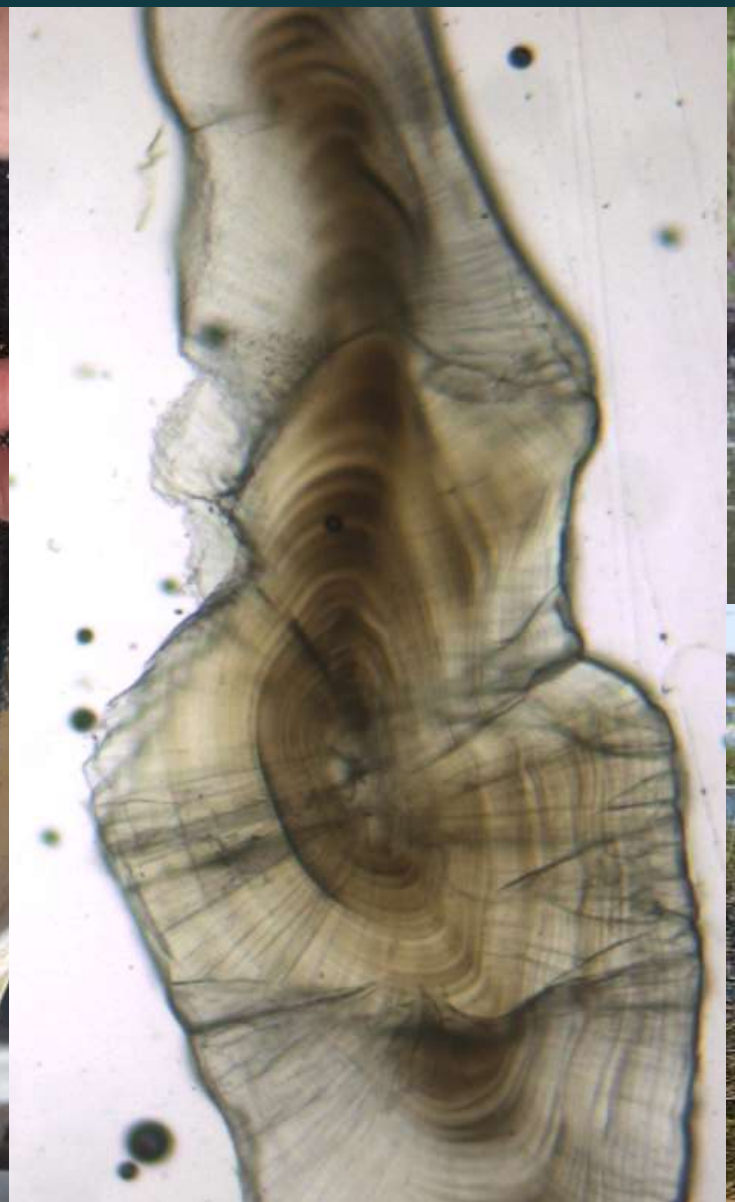
# Case study: Working with partners to amplify benefits

**Murray River**
Emily Barber, MDBA

## Coordinated Spring flows

- Commonwealth environmental water is released from Hume Dam + coordinated to occur with multiple other flows
- Re-use occurs, sending flows all the way to South Australia
- Benefits internationally significant wetlands, and populations of golden perch and the Australasian bittern, among others.

# The CEWH's Science Program
# Flow Monitoring, Evaluation and Research (Flow-MER)



Visit **www.flow-mer.org.au**

**Waterbird monitoring in the Macquarie Marshes (Flow-MER program)**

January 2023

# Despite the gains there is still more to do

- Population declines require long-term and sustained action
- Must continue and increase flows down the length of rivers
- Still too many cease-to-flow events in the north
- Operational and physical constraints getting in the way
- Science is showing us where we can do more with environmental water

Photo: Brendan Ebner, NSW DPI Fisheries

Photo: Emmalie Sanders,
Charles Sturt University

Photo: Dr Nicole McCasker, Flow-MER

Photo: Dr Gilad Bino, UNSW

# The next phase of Flow-MER

Australian Government
Commonwealth Environmental Water Holder

FLOW Monitoring Evaluation Research

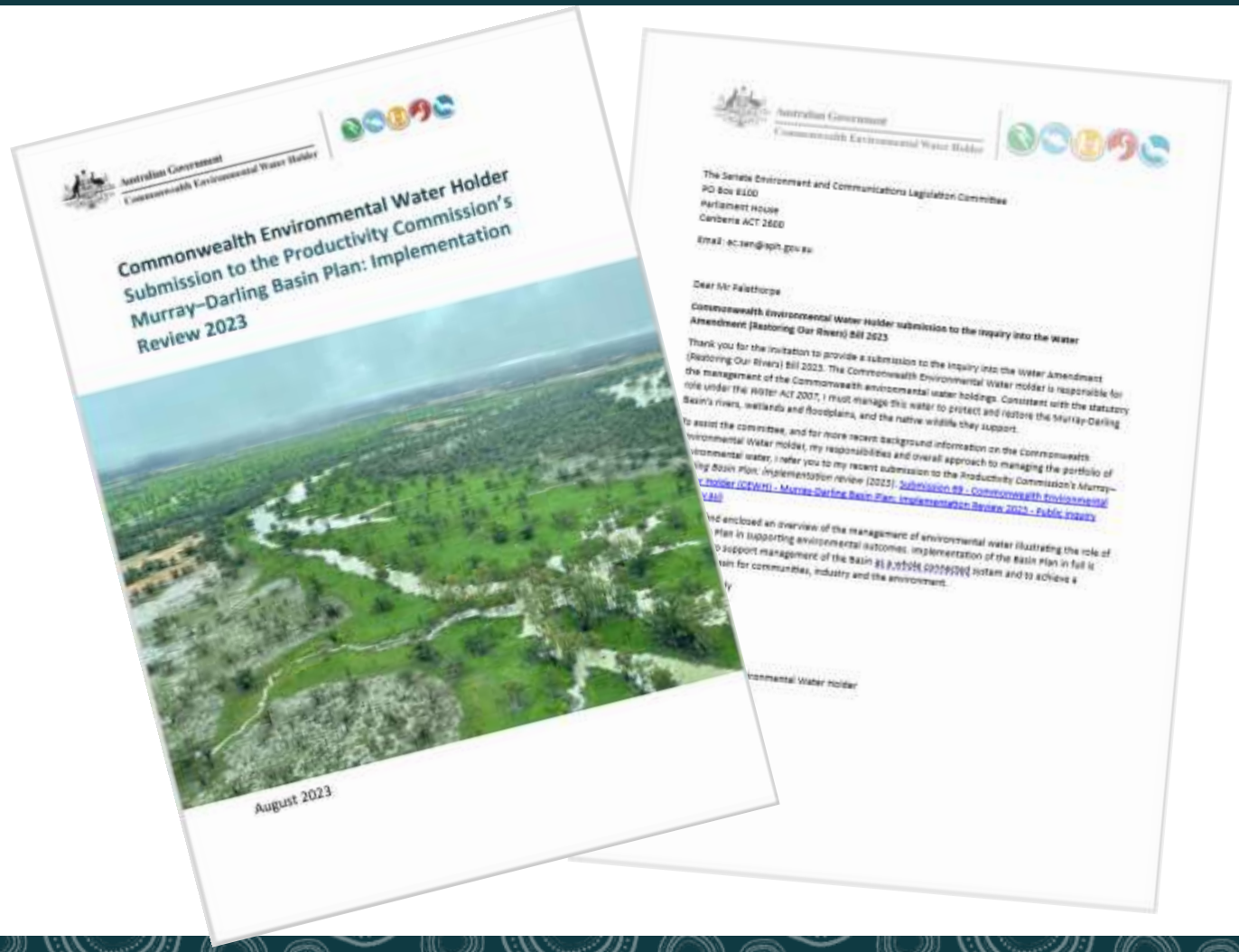
- Flow-MER2.0 monitoring phase launching 1 July 2024
- 9 organisations over 7 years - on the ground over next 5 years
- Expands on current program:
  - Additional sites in the Northern Basin (overall increase from 7 to 10 areas across the Basin)
  - Increased Area footprint to provide greater flexibility and responsiveness to watering events
  - Embedding First Nations knowledge and science
  - Greater knowledge exchange between providers, and with all stakeholders

# What the next phase will reveal

Through our monitoring and science program, by 2029 we will know more about:

1. climate change
2. First Nations science and knowledge
3. alteration of flows
4. monitoring and evaluation techniques
5. non-flow drivers
6. regional communities' knowledge/needs

# Advocating for change



# Water quality: A serious problem that needs attention

- Water quality – a shared responsibility
- All water management plans must include options beyond the use of environmental water
- We have plans in place for our water use
- Water quality issues will continue, possibly worsen

# Thank you

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**Dharriwaa (Narran Lakes)**
Photo: Shot by Harro, UNSW