

Delivering water – Differently

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Australian Government

Commonwealth Environmental Water Office



 @theCEWH
flickr.com/photos/envirogov/sets environment.gov.au/water/cewo

Recognition

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Victorian - NSW Mallee a history of irrigation development

Edwards R

Source SunRISE Mapping & Research

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ce upon a time there was....
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Source: Environment, Natural Resources and Regional Development Committee, adapted from Victorian Environmental Water Holder in Victorian Government, *Submission 39*, Appendix 2, p.11



Commonwealth Environmental Water Holder

Responsible for

- managing holdings
- protecting or restoring the environmental assets of the Murray-Darling Basin.
- consistent with the Water Act 2007 and Basin Plan's Environmental Watering Plan









Trade it for equal or greater environmental benefit.

- Commonwealth environmental water portfolio
- Large and complex 75 entitlement types across 17 Basin Plan regions
- Entitlements retain characteristics
- Water is delivered within existing river operations
- Public asset \$3 billion





Use it, to achieve basin plan outcomes





Use it, to achieve longitudinal connectivity





Hattah return flows





2017-18 – the problemExtended cease to flow meant that;Waterholes were drying up

 habitat and populations were becoming isolated

Then an e-opportunity occurred







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Pools drying back generally

Reduced quality and quantity of habitat

July 2018

April 2019



Fish death event on Barwon March 2019



Use it, to achieve fish breeding and recruitment







Gr Wa Fla Sil Pe

Group 1 Warm Temp Flow pulse Silver & Gold Perch



Group 2b Slow flowing Lakes & creeks Annual spawn Catfish, Gudgeo

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Group 3 Floodplain spec Slow flowing Annual spawn Gambusia (not native)



Group 4 & 5 – Generalists (small natives and Carp, Golfish, Redfin, Oriental weatherloach, Rainbow trout) Large range of streams and water body types Flexible spawning. Can cope in fast or slow water



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Lower Darling – Menindee releases Oct – Dec 2017



—MDBA base case (ML/day)



Use it, to achieve <u>all</u> basin plan outcomes across a water year





Until finally....

Use it, except when we don't... because sometimes we can't



2018-19 water delivery to SA



Sharing capacity for remainder of 2018-19



Start of Water year

Mid Water year

End water year

2018-19 modelled natural within SA



2018-19 entitlement flow & e-water within SA



2018-19 flow within SA



2018-19 flow within SA



2018-19 Actual flow within SA

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Annual barrage flows (GL)



Outcomes & Lessons: Lower Murray

Role of CEW in maintaining Lower Lake Levels in 2018-19 (dry conditions)







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Flow to South Australia 2014 to 2018, with barrage releases (ML/d)

Supporting the Coorong Ramsar site



Other water

Commonwealth environmental water

Other environmental water

Total barrage flow





Who does what?

Managing water in the Murray-Darling Basin... WHO DOES WHAT?

- Environmental watering (CEWH, TLM, States)
- Recovering water (DAF)
- Managing constraints (States)
- The Northern Basin Review (MDBA)
- The sustainable diversion limit adjustment process (MDBA)
- Water resource plans (States)
- Water markets and trading rules (MDBA)
- The River Murray and joint programs (all)