### 20 Years of The Living Murray

## Water delivery and infrastructure

Water and works brings the landscape to life. The objective of the infrastructure works program was to multiply the environmental benefits acheivable from the water available to The Living Murray. The scale of The Living Murray 'works + water' combination was unprecedented anywhere in the world at the time.

# Growth in water for the environment over time

The average long-term water availability of The Living Murray water portfolio is 488 GL. Similar to irrigators, yearly allocations depend on water available: lower in dry years and higher in wet years.

In 2009–10 there were only small water volumes available, with 66 GL used at icon sites to provide drought refuges and support critical habitats and ecological processes. Yet by 2014–15, environmental water holders were collectively able to deliver more than 1,000 GL to icon sites, and in 2016–17 around 1,500 GL, as part of larger coordinated multi-site environmental flows.

Under wetter conditions in 2022-23, more than 384 GL of water for the environment was delivered in a single event through the River Murray in and around higher natural flows, connecting thousands of kilometres of river and floodplains. This highlights how environmental water holders are working together to coordinate and make best use of all available water for the environment.

### The need for works as well as water

Under The Living Murray, over \$250 million was committed to a highly innovative construction program of environmental works and measures at icon sites. The two fundamental pillars of The Living Murray are the water recovery effort and environmental works and measures. It is the 'works + water' combination that enables the delivery of water to icon sites in a way that maximises the environmental benefits.

Infrastructure such as regulators, pumps, levee banks and fishways were built at icon sites between 2011 and 2015 to increase the efficiency of the delivery of water for the environment.

The water management structures enable controlled landscape-scale flooding using environmental water — often in much smaller volumes and at lower river levels than would be required without these works.

Flooding with works do not always deliver the full range of environmental outcomes provided by a natural flood. However, monitoring has shown that regular operation has contributed to delivering significant environmental outcomes at sites.



20 years of The Living Murray Much achieved, much to do

#### The Living Murray environmental works

Infrastructure works along the River Murray ensure the most efficient delivery of water for the environment and include things like levee banks, channels, fishways and regulators (which have gates that can be opened and closed to allow flooding and drying of wetlands).





The Koondrook–Perricoota regulators were built in 2013 with a total cost of around \$100 million.

Unfortunately, the use of the regulators, even at very small flow rates resulted in inundation and damage to private infrastructure. This has limited the use of the regulators to date.



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