

Guttrum and Benwell Forests Flooding Frequency



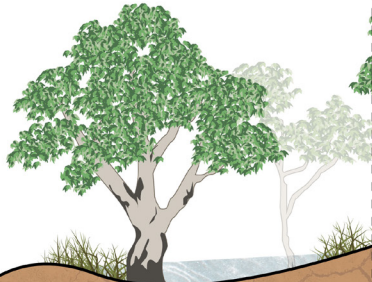
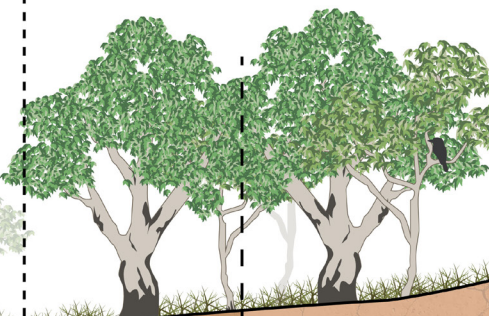
**VICTORIAN MURRAY FLOODPLAIN
RESTORATION PROJECT**
HEALTHY LANDSCAPES. STRONG COMMUNITIES

Over time, we have changed the way the Murray River flows to suit our needs, building weirs, dams and levees. Regional communities have benefited in many ways from river regulation, but we continue to see serious ecological impacts to floodplain health.

The Murray River and its floodplains depend on regular flooding to stay healthy. River regulation has caused blockages to flow and reduced the frequency, duration and extent of flood events. It also causes increasingly long dry periods between floods, making it harder for floodplains to bounce back and be healthy, resilient riverine ecosystems.

This project will enable water for the environment to be delivered efficiently and effectively, to give the floodplains the water they need while keeping irrigation water in the community. This will benefit all of our river communities – people, plants, and animals – as we restore the floodplains for generations to come.

Guttrum and Benwell Forests contain a range of habitat values with different requirements for watering regimes as flood dependant ecosystems. 'Ecological Water Regimes and Vegetation Classes' are used to develop ecological objectives and environmental watering targets for the proposed watering regimes.

	Lower Landscape Component		Mid Landscape Component	
				
Ecological Water Regime Class (EWRC)	Semi-Permanent Wetlands		River Red Gum Forest (flood-dependent understorey)	River Red Gum Forest and Woodland (flood-tolerant understorey)
Equivalent Murray River flow threshold*	17-21,000ML/d		22-26,000ML/d	>27,000ML/d
Frequency of watering event (Basin Plan with VMFRP)	7-9 years in 10 years		6-8 years in 10 years	3 years in 10 years
Operation Duration	5-6 months		3-4 months	<3 months
Operational Scenario	Semi-permanent wetland watering; Forest floodplain watering; Hybrid events		Forest floodplain watering; Hybrid events	N/A
* VMFRP works can enable water onto the targeted parts of the floodplain depending on site conditions (including naturally occurring inundation events) and ecological requirements using adaptive management				^ Not the target EWRC of VMFRP
For illustrative purposes only.				

* VMFRP sites can reduce the longest interval between floods to less than or equal to the maximum pre-regulation interval, depending on ecological thresholds and site condition.