






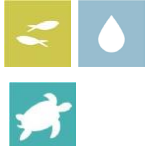

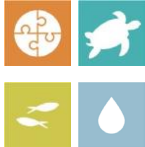
Variation to the Seasonal Watering Plan 2020-21






This variation was made to Section 5.2.1 Barmah Forest of the Seasonal Watering Plan 2020-21 by the VEWH Commission on 9 December 2020.

5.2.1 Barmah Forest

Amended text in Table 5.2.1 is shown in red.

Table 5.2.1 Potential environmental watering actions and objectives for the Barmah Forest

Potential environmental watering action	Functional watering objectives	Environmental objectives
<p>Winter/spring low flow to various waterways in Barmah Forest (variable flow rates and duration during July to December)</p> 	<ul style="list-style-type: none"> • Provide flow in forest waterways to maintain habitat for native fish and turtles • Facilitate the movement of native fish between floodplain waterways and the river • Remove accumulated organic matter from waterways to cycle carbon to the river system and minimise the risk of hypoxic blackwater 	
<p>Spring/summer freshes in the Murray River channel (one to three freshes that increase flow by at least 500 ML/day and maintain it for eight days during October to December)</p> 	<ul style="list-style-type: none"> • Trigger spawning of native fish species, primarily golden and silver perch 	
<p>Spring/summer/autumn freshes to Gulf and Boals creeks (100 ML/day for three to five days as required during November to April)</p> 	<ul style="list-style-type: none"> • Maintain critical drought-refuge areas in Barmah Forest to provide habitat for native fish and turtles • Flush drought-refuge pools to maintain water quality 	
<p>Spring/summer/autumn low flow to floodplain waterways including Sandspit, Gulf, Big Woodcutter, Boals, Island and Punt Paddock Lagoon (200 ML/day for 30 to 60 days during November to April)</p> 	<ul style="list-style-type: none"> • Provide flows to replenish refuge areas and maintain water quality • Provide flows to replenish permanent waterways, to maintain fish and turtle populations • Maintain connectivity to the river • Remove accumulated organic matter, cycle carbon to the river system and minimise the risk of hypoxic blackwater 	

<p>Fill or top up Boals Deadwood, Harbours Lake, Reedy Lagoon and Top Island wetlands (200–400 ML/day as needed during September to April)</p> 	<ul style="list-style-type: none"> • Provide a cue to initiate and/or maintain waterbird breeding • Maintain wetting duration and depth for growth of wetland vegetation 	
<p>Spring wetting of floodplain marshes (variable flow rates of 9,500–18,000 ML/day below Yarrowonga Weir for three months during September to December)</p> 	<ul style="list-style-type: none"> • Wet open plains for sufficient duration to allow the growth of floodplain marsh vegetation • Provide water to forest wetlands and low-lying floodplain areas to create foraging opportunities for waterbirds and increase available habitat for turtles, frogs and small-bodied native fish 	
<p>Autumn/winter low flow in the Murray River (1,800–4,000 ML/day downstream of Yarrowonga during May to June)</p> 	<ul style="list-style-type: none"> • Increase water depth in the Murray River channel to provide habitat for large-bodied native fish in the Murray River and unregulated anabranches in Barmah–Millewa Forest 	