

5.2.6 Lindsay, Mulcra and Wallpolla islands

Variation to the Seasonal Watering Plan 2018-19

This variation was made to the Lindsay, Mulcra and Wallpolla islands section of the *Seasonal Watering Plan 2018-19* at the VEWH Commission meeting on 19 September 2018.

Please note the amended text in red below.

Table 5.2.13 Potential environmental watering actions and objectives for the Lindsay, Mulcra and Wallpolla islands

Potential environmental watering	Environmental objectives
<i>Lindsay Island – Mullaroo Creek</i>	
Year-round low flows (600–1000 ML/day)	<ul style="list-style-type: none"> Maintain flowing water habitat for native fish species (such as Murray cod, silver perch and golden perch)
Spring high flow (up to 1,200 ML/day for up to 3 months between September–November)	<ul style="list-style-type: none"> Initiate fish movement and improve spawning and recruitment opportunities for native fish
Autumn high flow (up to 1,000 ML/day for 1 month between April–May)	<ul style="list-style-type: none"> Provide an early-season flow to stimulate return of large-bodied fish
<i>Lindsay Island – Lindsay River</i>	
Year-round low flows (40 ML/day via the northern regulator)	<ul style="list-style-type: none"> Maintain flowing water habitat for native fish species such as Murray cod, silver perch and golden perch
Spring high flow (up to 450 ML/day for up to 3 months between September–November via the northern regulator)	<ul style="list-style-type: none"> Initiate fish migration and improve spawning and recruitment opportunities for native fish
Spring high flow (up to 200 ML/day for up to 3 months between September–November via the southern regulator)	<ul style="list-style-type: none"> Extend flowing water habitat for native fish species, providing spawning and recruitment opportunities
Autumn high flow (up to 200 ML/day for 1 month between April–May via the northern regulator)	<ul style="list-style-type: none"> Provide an early-season flow to stimulate return of large-bodied fish
<i>Lindsay Island wetlands</i>	
Lake Wallawalla (partial fill in autumn)	<ul style="list-style-type: none"> Stimulate an increase in available food sources and productivity levels for aquatic and wetland plant species Maintain habitat for waterbirds
Websters Lagoon (partial or complete fill at any time)	<ul style="list-style-type: none"> Maintain wetland habitat for fish and waterbirds
<i>Mulcra Island – Potterwalkagee Creek</i>	
Year-round low flows in lower Potterwalkagee Creek (100–400 ML/day via the Stony Crossing regulator)	<ul style="list-style-type: none"> Maintain flowing water habitat for native fish species (such as Murray cod, silver perch and golden perch)
Winter/spring/summer low flows in upper Potterwalkagee Creek (up to 100 ML/day between June–February via the upper Potterwalkagee Creek regulator)	<ul style="list-style-type: none"> Maintain seasonal flowing water habitat for native fish species (such as Murray cod, silver perch and golden perch)
Spring/summer high flows in lower Potterwalkagee Creek (up to 400 ML/day)	

for 3 months between September–January via the Stony Crossing regulator and upper Potterwalkagee Creek Regulator)	<ul style="list-style-type: none"> • Initiate fish movement and improve spawning and recruitment opportunities for native fish
Spring/summer high flows in upper Potterwalkagee Creek (up to 150 ML/day for 3 months between September–January via the upper Potterwalkagee Creek regulator)	
<i>Mulcra Island wetlands</i>	
Snake Lagoon (partial or complete fill in winter/spring)	<ul style="list-style-type: none"> • Improve wetland productivity and provide habitat for wetland birds and fish
Mulcra Horseshoe (partial or complete fill in winter/spring)	
<i>Wallpolla Island</i>	
Wallpolla Horseshoe (partial or complete fill any time)	<ul style="list-style-type: none"> • Maintain variable water levels in the littoral zone to improve wetland productivity • Control river red gum saplings
Wallpolla East (partial or complete fill in spring or autumn)	<ul style="list-style-type: none"> • Improve condition of the riverine grassy woodland and floodway pond herbland ecological vegetation classes • Provide temporary habitat for aquatic species with productivity transferred to creek lines
Sandy Creek (partial or complete fill in spring or autumn)	<ul style="list-style-type: none"> • Improve the condition of the grassy riverine forest and floodway pond herbland ecological vegetation classes

Table 5.2.17 Potential environmental watering for Lindsay, Mulcra and Wallpolla islands under a range of planning scenarios

Planning scenario	Very dry	Dry	Average	Very wet
Expected conditions	<ul style="list-style-type: none"> Year-round low flows in the River Murray and no natural floodplain inundation; substantial wetland drying will occur 	<ul style="list-style-type: none"> Rare high-flow events in the River Murray and no natural floodplain inundation; substantial wetland drying will occur 	<ul style="list-style-type: none"> Short periods of high flows, most likely in late winter and spring, providing minor inundation of the floodplain 	<ul style="list-style-type: none"> Long periods of high flows with major spills from storages resulting in widespread inundation of the floodplain and inundation of most wetlands
Lindsay Island				
Mullaroo Creek and Lindsay River	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow 	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow 	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow 	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow 1 autumn high flow
Wetlands			<ul style="list-style-type: none"> Lake Wallawalla (partial fill) Websters Lagoon (partial to complete fill) 	<ul style="list-style-type: none"> Lake Wallawalla (partial fill) Websters Lagoon (complete fill)
Water demand ¹	• <2,000 ML	• <2,000 ML	• < 2,000 to 10,000 ML	• < 2,000 to 10,000 ML
Mulcra Island				
Lower Potterwalkagee Creek via regulators	<ul style="list-style-type: none"> Year-round low flow 	<ul style="list-style-type: none"> Year-round low flow 	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow 	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow
Upper Potterwalkagee Creek via regulator	<ul style="list-style-type: none"> Year-round low flow 	<ul style="list-style-type: none"> Year-round low flow 	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow 	<ul style="list-style-type: none"> Year-round low flow 1 spring high flow
Wetlands and floodplain				<ul style="list-style-type: none"> Snake Lagoon (complete fill) Mulcra Horseshoe (complete fill)
Water demand ¹	• <2,000 ML	• <2,000 ML	• <2,000 ML	• <2,000 ML
Wallpolla island				
Wetlands	<ul style="list-style-type: none"> Wallpolla Horseshoe (partial fill) 	<ul style="list-style-type: none"> Wallpolla Horseshoe (partial fill) 	<ul style="list-style-type: none"> Wallpolla Horseshoe (complete fill) Sandy Creek (partial or complete fill) 	<ul style="list-style-type: none"> Wallpolla Horseshoe (complete fill) Sandy Creek (partial or complete fill) Wallpolla East (partial or complete fill)

Water demand	• 1,000 ML	• 1,000 ML	• 1,600 ML	• 2,300 ML-2,600 ML
--------------	------------	------------	------------	---------------------

¹ Volume includes the estimated volume of water for the environment required to underwrite the losses associated with the delivery of consumptive water en route (for flows in Mullaroo Creek, Lindsay River, Potterwalkagee Creek and Mulcra Island).