

## Variation to the Seasonal Watering Plan 2022-23

This variation was made to Section 5.2.6 Lower Murray wetlands of the Seasonal Watering Plan 2022-23 by the VEWH Commission on 24 August 2022.

### 5.2.6 Lower Murray wetlands

Amended text in Table 5.2.14 is shown in red.

**Table 5.2.14 Potential environmental watering actions and objectives for the lower Murray wetlands**

| Potential environmental watering action   | Expected watering effect(s)  | Environmental objective(s)  |
|---|--|---|
| Brickworks Billabong (top-up in spring, top-ups as required over summer/autumn) | <ul style="list-style-type: none"> <li>Maintain water levels (target water level between 30.8 m AHD and 31.6 m AHD) to inundate benthic herblands including ruppia beds to provide nursery habitat for Murray hardyhead and provide high levels of aquatic productivity</li> <li>Maintain water quality suitable for Murray hardyhead</li> <li>Provide shallow-water habitat and exposed mudflats to support foraging and resting of waterbirds including migratory waterbirds</li> </ul>  |    |
| Catfish Billabong (top-up winter/spring)  | <ul style="list-style-type: none"> <li>Fill to 33.5 m AHD to inundate fringing woodland vegetation to improve condition and recruitment</li> <li>Allow water level to draw down over summer and autumn to: <ul style="list-style-type: none"> <li>promote the growth of a range of aquatic macrophytes that favour different water depth and inundation patterns, and</li> <li>provide suitable foraging conditions for wading shorebirds.</li> </ul> </li> <li>Maintain water levels above 30.8 m AHD to maintain permanent habitat for large-bodied and small-bodied native fish.</li> </ul> |  |
| Heywood's Lake (fill in autumn)   | <ul style="list-style-type: none"> <li>Fill to 56.8 m AHD to inundate fringing black box community to stimulate growth and flowering to improve condition and recruitment</li> <li>Provide a range of temporary open-water and shallow-water habitats to trigger the growth of various aquatic macrophytes and provide feeding and breeding opportunities for a variety of waterbirds.</li> </ul>  |  |

| Potential environmental watering action             | Expected watering effect(s)   | Environmental objective(s)  |
|---|---|---|
| Koorlong Lake (fill in spring, top-ups as required) | <ul style="list-style-type: none"> <li>• Increase and maintain the water level (target between 36.7m AHD and 38.0 m AHD) to support the growth of salineaquatic vegetation including ruppia to provide nursery habitat for Murray hardyhead and provide high levels of aquatic productivity</li> <li>• Maintain water levels within a 30 cm range to provide feeding resources for shorebirds and to maintain the Murray hardyhead population</li> </ul>                            |    |
| Lake Carpul (fill in spring/summer/autumn)          | <ul style="list-style-type: none"> <li>• Provide a range of open-water, shallow-water and emergent-vegetation habitats for water-dependent birds to support breeding and feeding opportunities</li> <li>• Inundate and wet outer fringing river red gum, black box, lignum and vegetation communities (target 52.23 m AHD) to improve their condition</li> <li>• Mobilise carbon and nutrients within the wetland to support wetland processes</li> </ul>                           |    |
| Lake Hawthorn (fill in spring, top-ups as required) | <ul style="list-style-type: none"> <li>• Target water level between 33 m AHD and 33.3 m AHD to: <ul style="list-style-type: none"> <li>○ Increase and maintain water levels to encourage the germination and growth of ruppia to provide nursery habitat for Murray hardyhead and visitation by shorebirds</li> <li>○ Maintain water levels within a 30 cm range to provide feeding resources for shorebirds and to maintain the Murray hardyhead population</li> </ul> </li> </ul> |   |
| Lake Powell (fill in spring/summer/autumn)          | <ul style="list-style-type: none"> <li>• Provide a range of open-water, shallow-water and emergent-vegetation habitats for water-dependent birds, to support breeding and feeding opportunities</li> <li>• Inundate and wet fringing river red gum, black box, lignum and vegetation communities (target 51.05 m AHD) to improve their condition</li> <li>• Mobilise carbon and nutrients within the wetland to support wetland processes</li> </ul>                                |  |
| Little Heywood's Lake (fill in autumn)              | <ul style="list-style-type: none"> <li>• Fill to 56.8 m AHD to inundate fringing black box community to stimulate growth and flowering to improve condition and recruitment</li> <li>• Provide a range of temporary open-water shallow-water and emergent-vegetation habitats to provide feeding and breeding opportunities for a variety of waterbirds</li> </ul>  |  |

| Potential environmental watering action   | Expected watering effect(s)   | Environmental objective(s)  |
|---|---|---|
| Nyah Floodplain (fill in autumn)  | <ul style="list-style-type: none"> <li>Inundate the base and littoral zone of Parnee Malloo Creek (target 63.2 m AHD) to support plant communities</li> <li>Improve the condition of vegetation communities to provide a range of habitats and feeding and breeding resources for birds and frogs</li> <li>Inundate the floodplain adjacent to Parnee Malloo Creek to promote the growth of herb and shrub layers</li> <li>Inundate river red gum to improve their condition</li> <li>Mobilise carbon and nutrients to promote chemical and biological processes</li> </ul> |    |
| Robertson Creek (top-up in spring)<br> | <ul style="list-style-type: none"> <li>Wet fringing river red gum, black box, lignum and vegetation communities (target 30.4 m AHD) to improve their condition</li> <li>Provide lateral spread of freshwater to refresh local groundwater to support the condition of trees not directly inundated</li> <li>Provide a range of open-water, shallow-water and inundated lignum habitats, to provide waterbird feeding opportunities and help protect the highly culturally significant site in the adjacent landscape</li> </ul>   |    |
| Robertson Wetland (partial fill in spring)  | <ul style="list-style-type: none"> <li>Wet fringing river red gum, black box, lignum and vegetation communities (target 28.4 -28.8 m AHD) to improve their condition</li> <li>Inundate cane grass beds to improve their condition and resilience</li> <li>Provide a range of open-water, shallow-water and inundated lignum habitat to provide waterbird feeding opportunities</li> </ul>   |  |