**Table 5.5.1 Potential environmental watering actions, expected watering effects and associated environmental objectives for the Broken River and upper Broken Creek**

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| **Potential environmental watering action** | **Expected watering effects** | **Environmental objectives** | |
| **Upper Broken Creek (reach 1)** | | | |
| Winter low flow (1-10 ML/day during June to August) | * Maintain aquatic habitat and connections between weir pools for native fish and platypus * Inundate benthic surfaces and large wood located at the bottom of the channel, which serves as habitat for waterbugs * Maintain water quality and oxygen levels for native fish, platypus and waterbugs | Icon indicating an environmental objective in this system benefits fish populations | Icon indicating an environmental objective in this system benefits platypus or rakali populations. |
| Spring low flow (1-10 ML/ day during September to November) | Icon indicating an environmental objective in this system benefits invertabrates. | Icon indicating an environmental objective in this system aims to maintain or increase water quality and/or conditions. |
| Summer low flow (1-10 ML/day during December to February)  ~~Summer low flow (1-5 ML/day during December to February)~~ |  |  |
| Autumn low flow (1-5 ML/day during March to May) |  |  |
| Summer/autumn fresh (one fresh of 50-100 ML/ day for 10 days during December to May) | * Flush pools to improve their water quality and increase oxygen levels | Icon indicating an environmental objective in this system aims to maintain or increase water quality and/or conditions. | |

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| **Potential environmental watering action** | **Expected watering effects** | **Environmental objectives** | |
| **Broken River (reach 1, 2 and 3)** | | | |
| Winter low flow (15-30 ML/day during June to August) | * Maintain habitat for in-stream and fringing vegetation, and prevent terrestrial vegetation from colonising the stream bed * Maintain riffles, pools and slackwater to provide diverse hydraulic habitat for native fish, aquatic plants, platypus and waterbugs * Maintain water quality and oxygen levels for native fish, platypus and waterbugs | Icon indicating an environmental objective in this system benefits fish populations | Icon indicating an environmental objective in this system benefits platypus or rakali populations. |
| Icon indicating an environmental objective in this system benefits vegetation | Icon indicating an environmental objective in this system benefits invertabrates. |
| Spring low flow (15- 30 ML/day during  September to November) |
| Icon indicating an environmental objective in this system aims to maintain or increase water quality and/or conditions. |  |
| Summer low flow (15-30 ML/day during December to May) |  |  |
| Autumn low flow (15-30 ML/day during March to May) |  |  |
| Summer/autumn fresh (one fresh of 400-500 ML/day for two to five days during December to May) | * Scour sediments around large wood, turn over bed sediments, replenish biofilms and maintain macrophyte habitat * Provide flow cues to stimulate native fish to breed and migrate * Maintain longitudinal connectivity for native fish passage | Icon indicating an environmental objective in this system benefits fish populations | Icon indicating an environmental objective in this system aims to maintain or strengthen physical stream characteristics |
| Icon indicating an environmental objective in this system benefits vegetation |  |