

Macdonald River Subcatchment



The Macdonald River subcatchment shares its western boundary with the Wollemi subcatchment and its southern boundary with the Webbs Creek and Hawkesbury River subcatchments. More than half of the land area is in Yengo National Park forming part of the Greater Blue Mountains World Heritage Area.

The majority of river reaches in this subcatchment are in near intact condition. The headwaters of some of the major creeks flow through National Park and the lower section of the subcatchment has been developed for agriculture. The Macdonald River has undergone river metamorphosis as a result of a series of floods in the late 1940s and early 1950s. Catastrophic channel change resulted in the channel greatly widening through bank erosion and filling up with sand. The lack of riverbank vegetation was a major contributor to the channel change.

Much of the main river channel is choked with the highly invasive black willow and this stand of willow is thought to be a source of seed to other subcatchments of the Hawkesbury Nepean. The channel of the main river now appears to be recovering from the initial erosion and presents a good opportunity for revegetation to stabilise the bank sediments.

There is significant local community commitment to managing the threats along the lower reaches of the Macdonald River.

Reach Management Recommendations – Macdonald River Subcatchment

Reach Name	Reach Description	Riparian Land Management Category	Reach Values	Reach Threats	Reach management recommendations (Planning, Education, Works, Monitoring, Institutional)
Big Boree R2		Revegetation			Reach within National Park. This is a small reach within National Park that was historically a farm. The banks lack native vegetation and could benefit from revegetation.
Big Yengo R2	Cut and Fill reach – single holding now taken over by NPWS including Big Yengo Homestead.	Revegetation			Reach within National Park. This is a small reach within National Park that was historically a farm. The banks lack native vegetation and could benefit from revegetation.
Boggy Swamp R1		Conservation (Near Intact outside reserve)			<ul style="list-style-type: none"> Develop conservation management agreements to protect remnant riparian vegetation (P)
Macdonald R2 and Macdonald Tidal	Boggy swamp Creek to confluence with Hawkesbury River at Wisemans Ferry.	Revegetation	<ul style="list-style-type: none"> Wetlands of regional or state significance (SREP 20 wetlands) Popular recreational fishing Popular swimming Significant irrigation water supply River based tourism is a major focus for the regional economy Significant community based environment activity 	<ul style="list-style-type: none"> Modified / engineered channel (localised bank protection works in lower section) High woody weed invasion (Privet, Willows, <i>Arundo donax</i>) Damaging access (stock and inappropriate human foreshore disturbance) Flow extraction Potential acid sulfate soils <p>Action Triggers</p> <ul style="list-style-type: none"> Severe immediate threat – Black Willow 	<ul style="list-style-type: none"> Revegetation with indigenous riparian vegetation (W) Riparian wetland management Removal/replacement of exotic riparian vegetation (W) Management of stock impact on waterways (W) Encourage adoption of sustainable land management practices in riparian lands (E) Manage human impacts at public recreation river access points and along foreshores (I,W) Water quantity / flow management (I) Maintain existing community based environment activity (E,P) Maintenance of recreational values – recreational water quality (M)
Macdonald R1		Conservation (Near Intact outside reserve)			<ul style="list-style-type: none"> Develop conservation management agreements to protect remnant riparian vegetation (P)
Palomorang R1		Conservation (Near Intact outside reserve)			<ul style="list-style-type: none"> Develop conservation management agreements to protect remnant riparian vegetation (P)
Womerah R1		Conservation (Near Intact outside reserve)			<ul style="list-style-type: none"> Develop conservation management agreements to protect remnant riparian vegetation (P)

Near Intact reaches within Reserved Lands: Big Boree R1, Big Boree R3, Big Yengo R1, Big Yengo R3, Melon R1, Yengo R1.