

Wodonga Urban Landcare Network

Wodonga Regional Waterway Action Plan
 Middle Creek Condition Summary

Erosion due to meander migration with revegetation located along the top of the bank.

Channel is undergoing deepening, which is leading to bank instabilities. There is also a lack of riparian vegetation.

Stock and lack of vegetation are increasing channel instabilities.

A large stand of Phragmites will improve water quality and provide habitat

Channel instabilities associated with a lack of vegetation and stock access

Woody weeds, including willows, colonising the channel

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WODONGA REGIONAL WATERWAY ACTION PLAN

Middle Creek:

Values:

- *Recreational Activities* – Bike Riding, walking
- *Revegetation* – Active Landcare members have undertaken substantial revegetation works.

Value	Upper Reach	Mid Reach	Lower Reach
Recreational Activities		✓	✓
Native Vegetation	✓	✓	

Threats:

- *Stock Access* – confined to the Upper and Mid Reach, is damaging the integrity of the banks and contributing to local erosion and sediment inputs.
- *Increased Bed Instability and Bank Erosion* – associated with landuse (e.g. cleared and urban catchment) and stock access and a lack of riparian vegetation in the Upper and Mid Reach.
- *Exotic Flora* – is outcompeting existing native vegetation, preventing natural recruitment, invading the channel and altering the natural stream and riparian ecology.
- *Loss of Large Woody Habitat* – leads to channel and riparian habitat loss, reduction in stream roughness and bed diversity.
- *Urban Development* – has the potential to increase the amount of runoff that enters Middle Creek resulting in more flow and flashier flow events.

Priority Management Actions:

- *Stock Access Management and Revegetation* – Manage stock access to Middle Creek to enhance the condition of vegetation, improve the condition of banks, reduce physical pugging and sedimentation, and to improve water quality. Install offstream watering points where stock will lose access to water after fencing.
- *Bed and Bank Erosion Management* – Undertake a stability analysis of Middle Creek to determine if the bed deepening is active and the extent of bed deepening. This may lead to the design and construction of rock chutes to manage the deepening.
- *Exotic Flora Management* – Undertake exotic flora management activities with the aim to eradicate seeding woody weeds. Implement a recurrent work program to monitor and control regrowth of woody weeds within Middle Creek. Target other highly invasive weed species including blackberry. Priority areas: 1) continue to control weeds to protect the integrity of revegetation and protection works between Beechworth-Wodonga Road and Frederick Street Road, 2) Control woody weeds the lower section of the Mid Reach, 3) Control woody weeds in the Upper Reach, 4) Control willow and other woody weeds in the Lower Reach.
- *Revegetation Following Weed Management* – Undertake revegetation along Middle Creek to improve bank stability and the habitat and aesthetic value following the removal of weeds. In the Lower Reach, a 'swampy' riparian woodland EVC may be more appropriate for revegetation in the wetter areas of the floodplain.
- *Stakeholder Engagement* – Discuss land management practices/improvement opportunities with relevant manager/authority.



Threat	Upper Reach	Mid Reach	Lower Reach
Stock Access	✓	✓	✓
Increased Bed Instability & Bank Erosion	✓	✓	✓
Exotic Flora	✓	✓	✓
Loss of Large Woody Habitat	✓	✓	✓
Urban Development		✓	✓

Action	Upper Reach	Mid Reach	Lower Reach
Stock Access Management and Revegetation	✓	✓	✓
Increased Bed and Bank Instability Management	✓	✓	✓
Exotic Flora Management	✓	✓	✓
Revegetation Following Weed Management	✓	✓	✓
Stakeholder Engagement	✓	✓	✓

