



**Blackjack Creek Riparian
Corridor/Channel
Reconstruction
Wandobah Reserve
Management Plan**

December 2014



Realising potential

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Acronyms

GSC	Gunnedah Shire Council
Reconstruction	Blackjack Creek Riparian Corridor/Channel Reconstruction
REF	Review of Environmental Factors
VMP	Vegetation Management Plan
VRZ	Vegetated Riparian Zone

1. Introduction

Gunnedah Shire Council (GSC) is proposing to reconstruct the Blackjack Creek riparian corridor/channel in order to provide for flood mitigation. GSC has completed extensive investigations to date, culminating in the preparation of the Blackjack Creek Riparian Corridor/Channel Reconstruction Concept Design and Feasibility Study (Constructive Solutions 2012).

The Blackjack Creek reconstruction was subject to approval under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999* for impact to the Koala. Approval 2013/6732 was granted on 22 November 2013. Preparation of a Wandobah Reserve Management Plan for the Blackjack Creek reconstruction is required as Condition 3 of Approval 2013/6732.

The requirements of Condition 3 of Approval 2013/6732 have been addressed throughout this Wandobah Reserve Management Plan as detailed in Table 1.

Table 1 – Conditions addressed in this VMP

Condition	Requirements	Relevant Section
2013/6732 – Condition 3a(i)	Management actions designed to improve the value of the reserve for koala habitat, including management of unauthorised access to and use of the reserve.	2
2013/6732 – Condition 3a(ii)	Management actions designed to improve the value of the reserve for koala habitat, including management of koala predators that may access the reserve.	2.4
2013/6732 – Condition 3b	An ongoing ecological monitoring program to monitor the success of the management actions in the Wandobah Reserve Management Plan and define measurable targets of management actions, performance indicators, and an adaptive management framework for the duration of the action's impact on koala habitat.	2.6

2. Management Actions

The following management actions are proposed to improve the value of Wandobah Reserve for koala habitat:

- Site induction;
- Pre-clearing inspection;
- Vehicle management;
- Waste management;
- Offset plantings;
- Monitoring and maintenance; and
- Community information/education.

2.1 Site induction

Prior to commencement of the Blackjack Creek reconstruction, all construction personnel will be inducted to the site. This induction will include detailed information regarding the impact of the Blackjack Creek reconstruction to koalas and the need to adhere to the relevant management plans and design constraints.

Workers and contractors not included at the preconstruction site induction will need to be inducted onto the site prior to commencing any works associated with the Blackjack Creek reconstruction.

2.2 Pre-clearing inspection

All trees are to be searched prior to clearing for koalas. No trees are to be cleared without the completion of this search, or with any fauna (particularly koala) present. Where fauna is found in a tree that is to be cleared, it must be allowed to move from the tree of its own volition. It is anticipated that the movement of fauna will generally occur overnight.

2.3 Vehicle management

In order to reduce the risk of vehicular strikes with any koalas as a result of the increased traffic movements and heavy machinery associated with the Blackjack Creek reconstruction, all vehicles will be required to adhere to a maximum speed limit of 20km/hr within the Wandobah Reserve during construction. The speed limit will be communicated via the site induction and sign posts at site entries.

All vehicles and construction equipment will be parked inside a secure site compound overnight. All vehicles are to be inspected prior to start-up on-site to ensure that no fauna is on, or in the vicinity of the vehicle.

2.4 Waste management

During construction, all food scraps and rubbish are to be appropriately disposed of in sealed receptacles (e.g. GSC issue wheeled rubbish bins located at the site compound) with the contents of the sealed receptacles disposed of according to their waste classification (e.g. general putrescible and recycling) at the Gunnedah Waste Management Facility.

On the completion of construction, permanent receptacles shall be installed at numerous locations within the reserve (e.g. adjacent to the skate park). The use of such receptacles will remove potential forage habitat for predators such as foxes.

2.5 Offset plantings

Planting of koala habitat trees throughout the Vegetated Riparian Zone (VRZ) and other portions of Wandobah Reserve will occur in accordance with the Review of Environmental Factors, Vegetation Management Plan (VMP) and Approval 2013/6732. This will result in a total offset of 15.138ha.

In addition, the provision of a VRZ for the entire length of Blackjack Creek within Wandobah Reserve and adjacent private property will result in an improvement in the function of Wandobah Reserve and a wildlife corridor for koalas moving north towards the Namoi River from the densely vegetated Blackjack Mountain.

2.6 Monitoring and maintenance

Specific monitoring and maintenance measures to ensure the success of the revegetation component of the Blackjack Creek reconstruction are provided in the VMP. In order to verify the success of the Blackjack Creek reconstruction with regards to koala habitat utilisation, ecological monitoring is also proposed.

This will occur as an annual on-site assessment by GSC or their contractor of koala utilisation of Wandobah Reserve, with sightings, claw marks and scats all considered to be acceptable indicators of koala usage. Community reports of koala sightings may also act as an indicator.

This information may be supplemented by any additional studies into koala habitat distribution and usage within the Gunnedah Local Government Area.

2.7 Community information/education

Access to Wandobah Reserve cannot be restricted as it is a public reserve. Instead GSC will educate the community about the value of Wandobah Reserve as koala habitat and the need to ensure that predators and vehicles are kept out of the Reserve. This information will be disseminated to the community via the local newspaper, GSC's newsletter, and the GSC website. The use of volunteers during the revegetation component of the Blackjack Creek reconstruction is anticipated to increase the sense of community ownership of Wandobah Reserve, which will in turn decrease instances of waste dumping and recreational vehicular access.

3. Performance Evaluation

3.1 Targets and performance indicators

The targets and performance indicators for the management actions of this Wandobah Reserve Management Plan are detailed in Table 2. These targets and performance indicators will be incorporated into the Construction Environmental Management Plan (CEMP) for the Blackjack Creek reconstruction, with non-conformances as part of the being a useful performance indicator.

Table 2 – Targets and performance indicators for management measures

Management Measure	Target	Performance Indicator	Responsibility	Frequency
During construction				
Site induction	100% conformance to flora & fauna management measures provided in the REF & construction contract.	Records of site induction & weekly inspections as part of Construction Environmental Management Plan. No non-conformances for personnel induction.	Construction contractor.	Weekly for the duration of construction.
Pre-clearing inspection	100% of trees to be cleared are to be checked for absence of fauna prior to clearing.	Pre-clearing inspection records for all clearing. No non-conformances for pre-clearing inspections.	Construction contractor.	Immediately prior to all clearing during construction.
Vehicle management	100% conformance with 20km/h speed limit within Wandobah Reserve during construction.	Records of no observances of speed exceedance by site supervisor as part of weekly inspections.	Construction contractor.	Daily for the duration of construction.

Management Measure	Target	Performance Indicator	Responsibility	Frequency
Waste management	100% of rubbish disposed of appropriately, with sealed receptacles for food scraps to prevent predator foraging.	Records of no observances of uncontained waste materials on site as part of weekly inspections. No non-conformances for waste disposal.	Construction contractor.	Weekly for the duration of construction.
Post-construction				
Offset planting	100% provision of 15.138ha koala habitat offset via revegetation. 100% maintenance of offset area, as per VMP.	No dead/dying plantings identified during inspections.	Revegetation contractor/GSC Parks & Gardens Division.	Daily during revegetation, monthly following completion of revegetation contract.
Monitoring & maintenance	Ongoing use of Wandobah Reserve by koalas.	Annual confirmation of koala presence in Wandobah Reserve via sightings, scats, claw marks, or community reports.	GSC or nominated ecological contractor.	Annually.
Community information/education	No rubbish dumping or recreational vehicle use in Wandobah Reserve.	Reports of no observances of recreational vehicle use. No findings of dumped rubbish by GSC Parks & Gardens staff during maintenance activities.	GSC Parks & Gardens Division.	Monthly or as per GSC Parks & Gardens maintenance program.

3.2 Adaptive management

The ongoing management of the Blackjack Creek reconstruction will generally be the responsibility of GSC Parks and Gardens Division once construction is complete. As such, the Blackjack Creek reconstruction will be integrated into the ongoing management of Wandobah Reserve as a whole under GSC's Parks and Gardens maintenance program. This integration will provide the necessary flexibility for adaptive management following emergency situations (e.g. following a flood event or during a drought).

The overall operational structure of GSC will also facilitate the adaptive management of Wandobah Reserve as inputs/recommendations/observations from the various GSC departments and the community can be collated, investigated and, if found to be appropriate, implemented into the ongoing management of Wandobah Reserve

The ongoing management of Wandobah Reserve in accordance with this management plan will occur well beyond the anticipated 20 years impact to koala habitat.