
ENVIRONMENTAL SIGNIFICANCE OPINION - Bimberi Creek Crossing Rehabilitation (ESO 202400030)

In accordance with section 140 (4) of the *Planning Act 2023* (the Act), I provide the following environmental significance opinion:

APPLICANT

ACT Parks and Conservation Service, as represented by Tom McElroy, Manager of the National Parks and Catchments Projects.

APPLICATION and DEVELOPMENT PROPOSAL

The applicant has applied under section 140 (4) of the Act to the Conservator of Flora and Fauna for an environmental significance opinion to the effect that the development proposal set out in the submission is not likely to have a significant adverse environmental impact (the application).

The development proposal is the upgrade of the exiting stream crossing infrastructure at Bimberi Creek on Yaouk Road in Namadgi National Park as described in the submission.

LOCATION

Block 21 District of Cotter River, Yaouk Road within Namadgi National Park.

MATTERS TO WHICH THIS OPINION APPLIES

This opinion applies only to the development proposal as described in the application.

OPINION

Provided the works are undertaken in a manner consistent with the following conditions, they are unlikely to cause a significant adverse environmental impact.

This opinion is granted subject to the following conditions made under s140 (4)(b) of the Act:

1. The proposal must be undertaken in accordance with avoidance and mitigation measures described in section 3.3 of the Bimberi Creek Crossing Rehabilitation ESO Supporting Statement.

2. All staff undertaking earthworks must be made aware of the potential presence of Riek's Crayfish prior to commencing works.
3. Any crayfish (regardless of species) unearthed during works must be relocated 30-50 m upstream or downstream of works.
4. Works must not be undertaken on site when a total fire ban is declared.
5. On days of high fire danger rating (FBI 25 or greater), all hot works and works that could emit a spark must cease and be deferred to days of suitable conditions. Hot works includes welding, cutting, grinding, or other works involving open flames or which emit a spark such as excavating hard rock, slashing and brush-cutting.
6. The proposal may be subject to random compliance inspection by Conservation Officers as requested by the Conservator of Flora and Fauna.

Attached is a Statement of Reasons for the decision.

Bren Burkevics
Conservator of Flora and Fauna

03 July 2024

STATEMENT OF REASONS REASONS FOR THE DECISION

The proposed development is a proposal mentioned in Schedule 1 of the *Planning (General) Regulation 2023* – requiring environmental impact statement, being:

Part 1.2, item 16 - proposal that is likely to have a significant adverse environmental impact on 1 or more of the following:

- (a) a critically endangered species;*
- (b) an endangered species;*
- (c) a vulnerable species;*
- (d) a conservation dependent species;*
- (e) a regionally threatened species;*
- (f) a regionally conservation dependent species;*
- (g) a provisionally listed threatened species;*
- (h) a listed migratory species;*
- (i) a threatened ecological community;*
- (j) a protected native species;*
- (k) a Ramsar wetland;*
- (l) any other protected matter*

The proposal is within known distribution of several threatened species, including:

- Two-spined Blackfish (*Gadopsis bispinosus*)
- Riek's Crayfish (*Euastacus rieki*)
- Macquarie Perch (*Macquaria australasica*)
- Broad-toothed Rat (*Mastacomys fuscus*)
- Smoky Mouse (*Pseudomys fumeus*)
- Spotted-Tailed Quoll (*Dasyurus maculatus*)
- Scarlet Robin (*Petroica boodang*)
- Gang-gang Cockatoo (*Callocephalon fimbriatum*)

Part 1.2, item 18 - proposal for development in a reserve, unless the proposal is for minor public works to be carried out by or for the Territory in accordance with a minor public works code approved by the conservator of flora and fauna under the Nature Conservation Act 2014 (NC Act), section 318A;

The proposal is within Namadgi National Park.

The proponent wants the application for the development approval assessed in the merit track on the grounds that the proposal is not likely to have a significant adverse environmental impact, and has applied to the Conservator of Flora and Fauna to that effect.

Meaning of *significant* adverse environmental impact

An adverse environmental impact is *significant* if—

- (a) the environmental function, system, value or entity that might be adversely impacted by a proposed development is significant; or
- (b) the cumulative or incremental effect of a proposed development might contribute to a substantial adverse impact on an environmental function, system, value or entity.

In deciding whether an adverse environmental impact is *significant*, the following matters must be taken into account:

- (a) the kind, size, frequency, intensity, scope and length of time of the impact;
- (b) the sensitivity, resilience and rarity of the environmental function, system, value or entity likely to be affected.

In deciding whether a development proposal is likely to have a significant adverse environmental impact it does not matter whether the adverse environmental impact is likely to occur on the site of the development or elsewhere.

It has been determined that the proposal is unlikely to have a significant environmental impact, based on the documentation submitted, known values of the site, and provided the works and ongoing management are carried out in accordance with the conditions attached to this ESO.

Project description

The proposal is the upgrade of the exiting stream crossing infrastructure at Bimberi Creek on Yaouk Road, which forms part of the Yaouk Fire Trail. The proposal will encompass a new rock-lined and armoured bed level crossing and will include the installation of a rock ramp fishway.

The stream crossing was formally a culvert, however this structure was too small to convey water flows during peak rainfall events. As a result, a significant rainfall event following the 2020 Orroral Valley fires led to the creek flooding the crossing and bypassing the culvert flow path. This created a progressively worsening gullied channel in the fire trail, making this crossing difficult to traverse and resulting in the culvert being removed to facilitate emergency fire access in 2023.

The proposed stream crossing has been designed to mirror stream function and morphology, by creating a resilient bed level crossing which will interfere minimally with the natural movement of water, sediment and stream debris along the channel, but resist degradation during natural flood events.

The proposal aims to achieve the following outcomes:

1. A fire trail network more resilient to future fire and flood disturbances in a changing climate, improving access for daily operational activities through to critical emergency response requirements;
2. Improved habitat values for aquatic species; and
3. Increased awareness, skill development and capacity building in the technical environmental construction sector for Parks and Conservation staff.

Large boulders will be installed within the stream bed and finished at natural surface level. A rock ramp fishway will be installed, consisting of three graded pools spanning the width of the bed, which will be separated by ridge rocks and filled with river cobble to mirror the natural bed habitat. Minor trail improvements adjacent to the stream crossing will also be undertaken, which include grading and capping with angular rock to permit flood flows to naturally sheet across the trail without degrading the trail surface.

All materials used will be stored in advance at the designated stockpile sites and transported to the works location using articulated dump trucks. Excavators will be used to load and unload materials, install the crossing works, and grade and armour the trail. Access to and from the site will be via a single route, commencing at Cotter Hut Road and continuing to Yaouk Road.

Documentation Submitted

- ESO Supporting Statement Bimberi Creek Crossing Rehabilitation;
- Letter of Authorisation; and
- Form 1M.

Natural conservation values present

Namadgi National Park conserves a wide variety of ecosystems and contributes to regional ecological connectivity through its links to reserves within NSW. The proposal is within the NC Act listed Bimberi Wilderness.

The proposal is within mapped subalpine woodland, specifically Black Sallee grass-herb woodland in drainage depression and moist valley flats. Three vegetation communities in Namadgi National Park are listed as threatened. None of these communities are likely to occur within, or downstream of, the development footprint.

At least 30 species listed as threatened under the NC Act have been recorded in Namadgi National Park, of which the following species are known to occur within proximity to the proposal:

- Two-spined Blackfish (*Gadopsis bispinosus*)
- Riek's Crayfish (*Euastacus rieki*)

- Macquarie Perch (*Macquaria australasica*)
- Broad-toothed Rat (*Mastacomys fuscus*)
- Smoky Mouse (*Pseudomys fumeus*)
- Spotted-Tailed Quoll (*Dasyurus maculatus*)
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Two-spined Blackfish and Macquarie Perch are known to occur within in the broader Cotter River Catchment, of which the Bimberi Creek is a tributary. However, only Two-spined Blackfish is known to occur within Bimberi Creek. The proposal is also within the known distribution of Riek's Crayfish and rare and genetically distinct Galaxias fish species.

The above listed threatened mammals may transit through the proposal site, which may facilitate dispersal across Bimberi Creek. Threatened birds are also likely to transit through the proposal site, however the site does not provide any unique habitat features for these species.

Potentially Significant Environmental Impacts

Protection of water quality by minimising impacts of erosion caused by management infrastructure and use (including creek crossings), is identified as a high priority in the Namadgi National Park Plan of Management 2010. The proposed use of rock armouring is expected to stabilise the degraded Bimberi Creek Crossing, decreasing risk of sedimentation and downstream impacts to water quality and aquatic habitat values.

Impacts to vegetation will be minimal, as the proposed crossing works are largely contained within the existing cleared road corridor. Some fringing vegetation on the trail verge will be disturbed to allow for the installation of the crossing structure and fishway, however a site survey will be undertaken prior to works to ensure rare and threatened flora is identified and avoided. Spread of weeds and pathogens will be managed by a commitment to remove all plant and soil matter from machinery and materials prior to entering the reserve, in addition to decontamination with 70% ethanol solution.

No trees are within the vicinity of the works and no thinning or limbing is required to facilitate machine access.

Construction materials (including quarried rock) will be stored at existing stock piling areas within the reserve. Unloading and stockpiling of materials at the works location will be within the road corridor and disturbed verge and the locations for storage will be clearly designated.

The existing crossing may be traversed by threatened species but is unlikely to provide unique or important habitat values. Threatened fish connectivity is likely to be improved through the instalment of a rock fishway, which facilitates upstream passage by creating small pools on the downstream edge at the level of the crossing. Indirect downstream impacts through sedimentation during construction will be managed through the temporary use of coir logs, geotextile sandbags and portable flood retention fences. Given the potential for Riek's Crayfish to occur within the proposal site, staff should be made aware of the potential to encounter this species, and a procedure to move any crayfish unearthed to suitable nearby habitat should be established. With the implementation of these mitigation measures, significant impacts to threatened species are unlikely to occur.

Conditions have been included to ensure the proposal will not significantly impact threatened species or ecological values within the Namadgi National Park reserve. As the works are being undertaken within a Fire Prone Area, the conditions also ensure the risk of unintentional fires is appropriately managed.

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6. The proposal may be subject to random compliance inspection by Conservation Officers as requested by the Conservator of Flora and Fauna.

It has been determined that if the works are undertaken in accordance with the above mitigation measures, they are unlikely to cause a significant adverse environmental impact.