
ENVIRONMENTAL SIGNIFICANCE OPINION - BLOCKS 240/29 PADDYS RIVER / BLOCK 21 COTTER RIVER – ROADSIDE VEGETATION MANAGEMENT ESO-202400001

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 Fire Management Unit, as represented by Kirsty Babington, Senior Fire Management Officer.

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 for management of vegetation along fire trails in accordance with PCS 23-24 BOP as described in the submission.

LOCATION

Works are proposed within the following blocks:

BLOCK	DISTRICT /DIVISION
240	Paddys River
29	Paddys River
21	Cotter River

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 in addition to the mitigation measures contained in the supporting application for an ESO, 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 suggests riparian buffers based on Stream Order, however as per ONC/FMU File Note (2023): It was agreed that as a starting point for reviewing the buffering distances of waterways for both trittering and chemical follow-up, the buffering distances would now be determined by the ACT Riparian Habitat layer, as developed in the CEMP Aquatic and Riparian monitoring plan. It is therefore expected- No treatment (trittering, vegetation removal or chemical) should occur within the mapped Riparian Habitat areas, unless agreed to through consultation with ONC.
2. *Bursaria spinosa* represents critical habitat for some species of rare butterflies, the proposed works should be carried out in autumn to reduce potential impacts.
3. To protect Bank's Brown Butterfly from disturbance during mating and egg laying, vegetation management may only be undertaken on Fishing Gap Fire trail between the start of June and end of September.
4. Vegetation clearance will not exceed two (2) metres back from the edge of the road drainage structure or batter slope on both sides of the fire trail unless specifically required for sight lines and safety where the limit will be four (4) metres from the edge of the road pavement.
5. In non-riparian areas fallen logs, large branches, grasses and shrubs and other course organic materials will not be disturbed below the minimum treatment height of 100mm.
6. Trees with a diameter at breast height (DBH) of more than 20cm (10cm for snow gums) must not be felled. Trees with 20cm DBH (or snow gums with 10cm DBH) will only be pruned of branches that overhang trails with a hand saw, chainsaw, or pole saw.
7. There will be no ground disturbance within the tree protection zones (dripline plus 2 metres) of trees to be retained or around protected vegetation.
8. All sites where protected plants or threatened species overlap with the treatment area or buffer must be inspected in the field by a qualified vegetation ecologist or botanist prior to works commencing, and a treatment plan, including appropriate buffer areas, developed to the satisfaction of the relevant Area Manager in PCS and ONC, EPSDD (see protocol below under "Protocol to identify and buffer significant sites").
9. Any works with records for Orchids will be timed so that they occur outside of the critical seasons for orchids to the satisfaction of ONC, EPSDD.
10. Vegetation may only be removed down to a height of not less than 100 mm above ground level. This retains the surface coverage and along with the mulched material prevents erosion.

11. The trittering machine will not de-limb branches from trees along the road/trail edge. This may only be done with chainsaws/pole-saws.
12. Movement of machinery is to be limited to existing fire trails and access roads/established turn around points.
13. No storage of equipment, parking or refuelling of equipment is to occur within any vegetation buffer area. No refuelling is to occur within any riparian zone and refuelling is to occur only on formed roads. Re-fuelling areas must be identified in a works plan and be provided to operators prior to the commencement of work.
14. All vehicles/machinery are to be washed down thoroughly to remove any seed, soil and plant material before entering the Reserves. All vehicles will be inspected by PCS prior to the commencement of works to ensure that they are free of plant materials and soil. Where a known area of pathogen or weed infestation occurs, the machine should move from clean to dirty and be cleaned on leaving the site to another worksite or clean area.
15. The work will only be undertaken when the fire trails are in suitable condition (not rain- affected) and the excavators will not damage the pavement. Excavators with either tracks or tyres can be used to protect the road surface.
16. Work will cease when the Fire Behaviour Index (FBI) ≥ 30 and recommence only when deemed suitable by PCS.
17. All operations will cease when:
 - a. Soils are saturated or 20mm of precipitation in a 24-hour period
 - b. Turbid water flowing for more than 10m
 - c. When machinery is causing rutting depth of more than 200mm below ground level and,
 - d. Not recommence until they are inspected and deemed suitable by PCS.
18. The proposed works may be subject to random compliance inspection by Conservation Officials 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
February 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 17 – proposal involving -

- (a) the clearing of more than 0.5ha of native vegetation in a native vegetation area, other than on land in a future urban area; or*
- (b) the clearing of more than 5.0ha of native vegetation in a native vegetation area on land in a future urban area*

The proposal will impact on a total treated area of approximately 3ha.

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, section 318A;

The works as proposed will pass through Tidbinbilla Nature Reserve, Bullen Range Nature Reserve and 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 project proposes vegetation trimming along 3 existing fire trails;

Fishing Gap fire trail - Tidbinbilla Nature Reserve.

Bullen Powerline Fire Trail - Bullen Range Nature Reserve.

Hardy Range Fire trail – Namadgi National Park.

The works will cover 3km along Bullen Powerline Trail, 2km along Hardy Range Fire Trail, and 2.5km along Fishing Gap fire trail. Works are required to maintain access to the fire trails where vegetation is encroaching on the trails impeding access of management and fire resources and obstructing line of sight for vehicles using the trails. Fire trails within the ACT's reserve areas and conservation estate are critical to effectively performing land management activities and in suppressing wildfire.

The works will involve trimming of vegetation up to a depth of 2m from the road shoulder or the outside of road drainage structures, and up to 4m in depth around sharp bends and switchbacks to further improve sight lines at these conflict points. The works will be undertaken with a mulching head mounted on an excavator. This method represents the best value for money in terms of cost per kilometre of controlling woody regrowth on fire trails. The use of the mulching machines for roadside vegetation management also replaces a large amount of chainsaw work, reducing the risk of serious injury to staff. The work will take place when the fire trail is accessible and dry enough to ensure machinery does not cause excessive damage to the pavement.

Documentation Submitted

- ESO Supporting documentation;
- Letter(s) of Authorisation;
- Form 1M.

Natural conservation values present

The areas identified for works are in the burnt area from the 2003 bushfires, with part of Fishing Gap Fire Trail burnt in the 2020 Orroral Fire. The sites are highly diverse and support habitat for threatened fauna and flora species.

The Fishing Gap fire trail - Tidbinbilla Nature Reserve

The Tidbinbilla Nature Reserve is 6,466 hectares adjacent to the Namadgi National Park and is part of the Australian Alps National Parks system protecting much of the alpine, subalpine and montane environments of mainland Australia. Tidbinbilla Nature Reserve contains an area of 'national park' as well as an area of 'special purpose reserve' over those areas that have been developed for recreation, education and research (e.g. the Rock Wallaby breeding program and the Corroboree Frog breeding facility).

Vegetation communities in Tidbinbilla include subalpine snow gum on the exposed ridges to woodlands, grassland and shrublands in the valley, with tall wet forests in the moist sheltered gullies. These vegetation communities provide habitat for a wide range of native species including 3 species listed as endangered or vulnerable under *Nature Conservation Act 2014*;

- Spotted-tailed quoll (*Dasyurus maculatus*)
- Smokey Mouse (*Pseudomys fumeus*)
- Greater Glider (*Petauroides Volans*)

And

- Rosenberg's Monitor (*Varanus Rosenbergi*) (listed as vulnerable in NSW)

The area also supports critical habitat for rare butterflies

- Blackthorn bush (*Bursaria spinosa*)

and records sightings of Banks' Brown Butterfly (*Heteronympha banksii banksii*) a rare species in the ACT.

Bullen Powerline Fire Trail - Bullen Range Nature Reserve.

Bullen Range Nature Reserve covers an area of 4100 hectares along the Murrumbidgee River corridor. The Reserve supports one of only seven breeding locations for Peregrine Falcons in the ACT as well as critical habitat for protected flora and fauna species:

- Fan Grevillea (*Grevillea ramosissima subsp. ramosissima*).
- Tuggeranong Lignum (*Muehlenbeckia Tuggeranong*)
- Rosenberg's Monitor (*Varanus Rosenbergi*) (listed as vulnerable in NSW)

Hardy Range Fire trail – Namadgi National Park.

Namadgi National Park conserves a wide variety of ecosystems and contributes to regional ecological connectivity through its links to reserves within NSW. The ecosystems include:

- low open woodland covering much of the park with Snow Gum woodland in the high mountain areas;

- open grasslands and frost hollows on the eastern side of the park in the Orroral and Boboyan valleys;
- tall wet forests with Alpine Ash and fern gullies in sheltered locations, especially on the western side of the park;
- wetlands including sedge fens in the valleys and sphagnum moss bogs on the peaks that are important for water catchment and as habitat for the endangered Northern Corroboree Frog (*Pseudophryne pengilleyi*), and
- sub-alpine peaks and alpine communities above 1600m.

At least 35 species of mammals, 14 species or subspecies of frog, over 41 species of reptiles, four native fish species and over 130 species of birds have been recorded in Namadgi National park. There are 12 animal species listed as threatened under the *Nature Conservation Act 2014*:

- Northern Corroboree Frog (*Pseudophryne pengilleyi*)
- Two-Spined Blackfish (*Gadopsis bispinosus*)
- Trout Cod (*Maccullochella macquariensis*)
- Macquarie Perch (*Macquaria australasica*)
- Murray River Crayfish (*Euastacus armatus*)
- Hooded Robin (*Melanodryas cucullate*)
- Brown Treecreeper (*Climacteris picumnus*)
- Varied Sitella (*Daphoenositta chrysoptera*)
- Little Eagle (*Hieraaetus morphnoides*)
- White-Winged Triller (*Lalage sueurii*)
- Smoky Mouse (*Pseudomys fumeus*)
- Spotted-Tailed Quoll (*Dasyurus maculates*)

Three vegetation communities in Namadgi have been identified as requiring special protection and management. These are:

- *Natural Temperate Grassland of the Southern Tablelands of NSW and the ACT*
- Montane and Subalpine Bog (forming a significant component of the Commonwealth listed *Alpine Sphagnum Bogs and Associated Fens*)
- Black Cypress Pine Tableland Open Forest.

Several rare and unusual species occur in Namadgi, but only four plant species are formally recognised as threatened: *Thesium austral* (Austral toadflax), *Pomaderris pallida* (Pale Pomaderris), *Gentiana baeuerlenii* (Baeuerlen's Gentian) and *Corunastylis ectopa* (Brindabella Midge Orchid).

Potentially Significant Environmental Impacts

The works as proposed will have minimal impacts to the protected values across the 3 sites. Works will be kept to the already disturbed areas of the original fire trail construction and past vegetation treatment works; these areas are frequently

disturbed by road vehicle passage. The works will be undertaken with a mulching head mounted on an excavator. The mulching head is adjustable and will be used to trim vegetation at a height of between 100mm and 200mm to avoid any ground disturbance. The operator can carefully manoeuvre the machinery to selectively remove vegetation and ensure no ground disturbance will occur. A trained botanist will assess the areas to be treated checking for the presence of previously recorded plants, record new sightings and establish buffer areas where required to manage the impact on these sites.

All mature trees greater than or equal to 20cm diameter (10cm for snow gums) at breast height will be retained and only removed if they pose a hazard to the road network. Removal will only occur with approval from a district officer or the Office of Nature Conservation (ONC). Trees may be pruned of branches which overhang the trail and encroach on the road footprint with a hand saw, chainsaw or pole saw. Vegetation that occurs in riparian areas will be retained and not treated as part of trittering/vegetation management. In non-riparian areas fallen logs, large branches, grasses and shrubs and other coarse organic materials will not be disturbed below the minimum treatment height of 100mm.

Potential risks have been well mitigated by the proposal. All vegetation management works will be carried out within the area that has previously been disturbed by the road's construction and maintenance and will not increase the visual impacts of existing fire trails. The machinery used will be accompanied by a PCS team member to ensure quality of works and provide initial response in case of fire. All termite mounds or potential Rosenberg's Monitor nesting (egg laying) sites and will be avoided by the works.. No impact is expected to Spotted-tailed Quoll habitat structures including tree hollows, larger dens, logs and branches. These structures will be avoided unless they pose a significant hazard. Smokey Mouse inhabits rocky outcroppings, which are not affected by the treatment.

Conditions have been included to ensure that works have minimal impacts on riparian habitat and minimise impacts to rare butterflies.

- The proposal suggests riparian buffers based on Stream Order, however as per ONC/FMU File Note (2023): It was agreed that as a starting point for reviewing the buffering distances of waterways for both trittering and chemical follow-up, the buffering distances would now be determined by the ACT Riparian Habitat layer, as developed in the CEMP Aquatic and Riparian monitoring plan. It is therefore expected- No treatment (trittring, vegetation removal or chemical) should occur within the mapped Riparian Habitat areas, unless agreed to through consultation with ONC.

- *Bursaria spinosa* represents critical habitat for some species of rare butterflies, the proposed works should be carried out in autumn to reduce potential impacts.
- To protect Bank's Brown Butterfly from disturbance during mating and egg laying, vegetation management may only be undertaken on Fishing Gap Fire trail between the start of June and end of September.

It has been determined that if the works are undertaken in a manner consistent with the above conditions attached to the ESO in addition to the mitigation measures contained in the supporting application for an ESO, they are unlikely to cause a significant adverse environmental impact.