Australian Capital Territory

Planning and Development (Environmental Significance Opinion – Bushfire Trail Vegetation Management Works within the ACT's Conservation Estate) Notice 2015

Notifiable Instrument NI2015–648

Made under the

Planning and Development Act 2007, s 138AD (Requirements in relation to environmental significance opinions)

1 Name of instrument

This instrument is the *Planning and Development (Environmental Significance Opinion – Bushfire Trail Vegetation Management Works within the ACT's Conservation Estate) Notice 2015.*

2 Commencement

This instrument commences on the day after notification.

3 Environmental Significance Opinion

The Conservator of Flora and Fauna has prepared an Environmental Significance Opinion (ESO) under section 138AB of the *Planning and Development Act 2007* (the Act), relating to items 1, 2 and 3 of Part 4.3 of Schedule 4 of the Act.

The text of the ESO is in the schedule.

Note 1: A copy of the ESO may be obtained from the Environment and Planning Directorate website:

http://www.planning.act.gov.au/topics/design_build/da_assessment/environmental_assessment/environmental_significance_opinions

Note 2: Under section 138AD(6) of the Act, the ESO and the notice including the text of the ESO expire 18 months after the day the notice is notified.

Dorte Ekelund
Chief Planning Executive
12 November 2015

ACT Government
Environment and Planning

Ms Dorte Ekelund
Chief Planning Executive
ACT Planning and Land Authority
Dame Pattie Menzies Building
DICKSON ACT 2602

Dear Ms ~~Ekelund~~ Dorte

This is to advise of my decision, under s.138AB(4) of the *Planning and Development Act 2007*, on the request for an environmental significance opinion for the vegetation management on the sides of 400 kilometres of fire trail within the ACT's conservation estate that is managed by the Parks and Conservation Service.

For the sake of completeness, the attached decision includes areas within the reserve system that are subject to the provisions of the National Capital Plan.

The proposal is not likely to have a significant adverse environmental impact:

- on a species or ecological community that is endangered;
- by the clearing of more than 0.5ha of native vegetation;
- on land reserved under s. 315 for the purpose of a wilderness area, national park, nature reserve or special purpose reserve;

provided all works are in accordance with the conditions as imposed.

Please find attached the Environmental Significance Opinion and a Statement of Reasons for the decision.

Yours sincerely

Dr Annie Lane
Conservator of Flora and Fauna

5 November 2015

ENVIRONMENTAL SIGNIFICANCE OPINION

In accordance with section 138AB(4) of the *Planning and Development Act 2007* (the Act), I provide the following conditional environmental significance opinion:

APPLICANT

Neil Cooper, Manager, Fire, Forests and Roads Unit, Parks and City Services, Territory and Municipal Services Directorate.

APPLICATION and DEVELOPMENT PROPOSAL

The applicant has applied under section 138AA 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 vegetation management on the sides of 400 kilometres of fire trail within the ACT's conservation estate that is managed by the Parks and Conservation Service. The areas of vegetation to be managed are within the original construction footprint of the trails and much of the vegetation is re-growth as described in the submission.

Vegetation that

- encroaches on the fire trail, and impedes access by fire units, or
- obstructs the line of sight on corners,

will be mulched with the use of machinery to approximately 2.0 m from the edge of existing fire trails, with some areas up to 3.0 m where the trails are to be used as containment lines in hazard reduction burns.

LOCATION

Within Namadgi National Park and surrounds;
Tidbinbilla Nature Reserve;
Within Canberra Nature Park, more specifically Mt Ainslie, Mt Majura, The Pinnacle, Mt Painter and Black Mountain; and
Lower Cotter Catchment

Of these the following trails are on Designated Land:

a) approx 3.7 kms on Mt Ainslie / Mt Majura (Map ID AV111 and AV151);
b) approx 1.2 kms on The Pinnacle (Map ID AV AV130);

c) approx 2 kms on Mt Painter (Map ID AV131); and
d) approx 4.2 kms on Black Mountain (Map ID AV AV153).

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 the manner consistent with the conditions as imposed, they are unlikely to cause a significant adverse environmental impact.

This opinion is granted subject to the following conditions made under s138AB(4) of the Act.

- No work is to occur:

  AV138_1 and **AV138_2 Mount Franklin Road**: Between Brindabella Road in the north to Cotter Hut Road in the south, Mount Franklin Road has had extensive upgrade and maintenance in the past year. Vegetation along either side of Mount Franklin Road is in a state of recovery from these works. No vegetation maintenance is supported at this time.

  AV 133: Bendora Road: No works using machinery in the area shown pink on Annexure A as this area contains the only known population of the critically endangered Brindabella Midge Orchid (*Corunastylis ectopa*).

- The maximum width of clearance of re-growth vegetation on straight sections of fire trail will be the pavement width for that standard of fire trail and a maximum of 2 metres of fire trail verge or shoulder on either side. The width of drainage structures and batters are to be included within the mulched area and are not additional.

- On sharp corners, mulching of re-growth will be to a maximum of 4 metres from the apex of the fire trail pavement on the inside curve. The outside corner will be mulched to the edge of the pavement.

- At designated passing bays, turnaround areas and sections of fire trail at which the pavement width exceeds the standard for that class of road, mulching will only be applied to the fire trail pavement.

- Movement of machinery is to be limited to existing fire trails and access roads. Machinery is to be cleaned of weeds and mud when moving between sites.
- No habitat trees or trees with a trunk diameter of 20 cm (10 cm for snow gum (*Eucalyptus pauciflora*)) or greater are to be removed, especially those trees that contain hollows or are standing dead trees;
- All proposed treatment areas are to be intersected with spatial data for known locations of protected plants and threatened fauna records to establish possible impacts sites and an appropriate buffer applied. A buffer of 100 m is required due to accuracy and age of some locations recorded. This is to be interpreted to mean that where a record does not appear to be on a fire trail, but is within 100 m of a fire trail, that the mid-point of an intersection between a 100 m buffer of the grid reference and the fire trail be treated as the grid reference point;
- Spatial data to support the intersect analysis must be provided by Conservation Research, Environment and Planning Directorate, to ensure the most up to date data are used;
- All sites where a protected plant or threatened species overlaps with the treatment area or buffer must be inspected in the field by a trained botanist. Site inspection is to extend along the road at least 100 metres either side of the indicated GPS co-ordinates and a minimum 5 metres in from the road edge;
- If the species / habitat of concern occurs within 5 metres of the edge of the fire trail pavement, and therefore within the working zone and potential impact zone of the slash buster, the contracted botanist will determine its distribution at the site and the boundary will be buffered by 10 metres. If the contract botanist is of the opinion that a 10m buffer is inadequate to protect a focal organism or community from the effects of mulching, the contract botanist will then propose a larger buffer for consideration by Conservation Research and the Fire Unit;
- In the event that no protected species are located at inspection sites at the time of inspection and the focal species is likely to be adversely impacted by the treatment at the time the treatment will occur, a 10 metre buffer is to be established at the GPS co-ordinates as the timing of the survey may not be ideal for location/identification of target species. If the contract botanist is of the opinion that a 10 metres buffer is inadequate to protect a focal organism or community from the effects of mulching, the contract botanist will then propose a larger buffer for consideration by Conservation Research and the Fire Unit.

- Within this identified buffer area Conservation Research will advise whether vegetation control is possible (and if necessary determine restrictions) or is to be excluded;
- No storage of equipment, parking or refuelling of equipment is to occur within any buffer area;
- All works must be in accordance with the "Protocol for cultural heritage assessment of vegetation management activities along PCS tracks and trails";
- All buffers will be marked in the field and the slash buster operator shown each location;
- Parks and Conservation must ensure that information on registered heritage places along the fire trails is current – i.e. if the search of ACT Heritage mapping is greater than three months old, the search is to be updated;
- In the event that currently unrecorded heritage items are observed during fire trail works, existing Parks and Conservation protocols for unexpected finds are to be implemented

Attached is a Statement of Reasons for the decision.

Dr A. Lane
Conservator of Flora and Fauna

5 November 2015

STATEMENT OF REASONS
REASONS FOR THE DECISION

The proposed development is a proposal mentioned in Schedule 4 of the *Planning and Development Act 2007* – Development proposal for an activity requiring an EIS Schedule 4, being:

Part 4.3 Item 1
proposal that is likely to have a significant adverse environmental impact on 1 or more of the following, unless the conservator of flora and fauna produces an environmental significance opinion that the proposal is not likely to have a significant adverse environmental impact:

(a) a species or ecological community that is endangered;
(b) a species that is vulnerable;
(c) a species that is protected;

Part 4.3 Item 2
the clearing of more than 0.5 ha of native vegetation other than on land that is designated as a future urban area under the Territory Plan unless the Conservator of Flora and Fauna produces an environmental significance opinion that the clearing is not likely to have a significant adverse environmental impact;

Part 4.3, item 3,
being development on land reserved under s. 315 for the purpose of a wilderness area, national park, nature reserve or special purpose reserve.

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 for an environmental significance opinion (ESO) to that effect.

Some of the works are within Designated Land and therefore subject to the provisions of the National Capital Plan, not the *Planning and Development Act 2007.* As the Planning and Development Act does not apply to designated areas, the impact on these reserves does not trigger the requirement for environment assessment. However, for completeness sake, the following documentation will include an assessment of all of the works.

The proponent wants the application for the development approval assessed for an environmental significance opinion 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

Vegetation management on the sides of approximately 400 km kilometres of fire trail on the Parks and Conservation Service estate within the ACT. The works are within:

- Namadgi National Park and surrounds;
- Tidbinbilla Nature Reserve;
- Canberra Nature Park, more specifically Mt Ainslie, Mt Majura, The Pinnacle, Mt Painter and Black Mountain; and
- Lower Cotter Catchment.

The works within designated land that are not covered by the provisions of the *Planning and Development Act 2007* are the works within Canberra Nature Park, more specifically:

a) approx 3.7 kms on Mt Ainslie / Mt Majura (Map ID AV111 and AV151)
b) approx 1.2 kms on The Pinnacle (Map ID AV AV130)
c) approx 2 kms on Mt Painter (Map ID AV131)
d) approx 4.2 kms on Black Mountain (Map ID AV AV153)

Vegetation regrowth up to 2.0 metres from the edge of existing fire trails will be managed to achieve a height of approximately 10 cm by the use of 'slash busters'. The 'slash busters' are 17 tonne, rubber-tyred Komatsu excavators with a mulching attachment on the end of a boom. The excavator remains stationary on the road / trails and the operator moves the mulching head to the side of the trail and over the top of the vegetation to be cleared until it reaches the stipulated minimum height.

Trees less than 20 cm diameter at breast height (or less than 10 cm for snow gum *Eucalyptus pauciflora*) may be felled. Those of bigger girth will be pruned where necessary to facilitate passage of fire vehicles of a type designated to the fire trail.

A subset of the trails identified for vegetation management work will be used as containment lines for prescribed burns in the 2015-16 Territory and Municipal Services (TAMS) Bushfire Operations Plan (BOP) program. In order to improve crew safety and ensure the integrity of the containment lines, the clearance zone for these trails will be extended from two to three metres on the treatment (burn) side of the fire trail where possible and where it is still within the construction footprint of the trails.

This work is consistent with the commitments made in the Strategic Bushfire Management Plan.

Documentation Submitted

- Locality Maps x 27;
- Plan showing proposed cross section of works;
- List of known sites of environmental significance;
- List of known sites of heritage significance;
- List of block numbers of work locations;
- Response to part 9 of Application Form;
- Project Description;
- Protocol for cultural heritage assessment of vegetation management activities along Parks and Conservation Service (PCS) tracks and trails;
- Protocol for environmental assessment of vegetation management activities along PCS tracks and trails;
- Significant Site Identification and Exclusion Procedure;
- ACT Parks and Conservation Service Mechanical Roadside Vegetation Removal Works Plan 003; and
- Form 1M.

Natural conservation values present

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 1600 m.

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 cucullata*
- 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*); and
- Black Cypress Pine Tableland Open Forest.

Several rare and unusual species occur in Namadgi, but only two plant species are formally recognised as threatened: *Gentiana baeuerlenii* (a sub-alpine herb) and *Corunastylis ectopa (*Brindabella Midge Orchid*)*. Both are declared threatened under ACT and Commonwealth legislation.

The Ginini Flats Wetlands is included on the *List of Wetlands of International Importance*(Ramsar) in recognition of its significant ecological characteristics and is the only Ramsar Wetland in the ACT.

Namadgi Surrounds and Lower Cotter Catchment
Most of this area was planted as pine plantation during the last century. This was initially undertaken to stabilise soil erosion but was the area of pine plantation was expanded by the clearing of native forest for commercial reasons in the 1950's. Virtually all of the vegetation was severely burnt in the 2003 wildfire with the pine plantations being destroyed. B oth former pine plantations and open forest areas are now undergoing natural regeneration and assisted restoration

Canberra Nature Park
Canberra Nature Park includes native grassland, woodland and forest communities. Over 100 plant species that occur within Canberra Nature Park are known from five or less locations in the ACT (Mulvaney 2014).

Most reserves have patches of high condition understorey in which rare and threatened plant species may be concentrated.

Impact on the Reserve

Chapter 7 of the Namadgi National Park Plan of Management 2010 contains fire management policies and actions. An Objective for Fire Access is **"Access infrastructure is provided to support fire management activities".**

The Plan also states:
An access strategy for fire management in the park will be developed that takes account of environmental, social and economic values. This strategy will include:

- the provision of an appropriate fire trail network to assist in suppression and/or management operations and to provide the basis for fire fuel management activities
- specified standards for the maintenance of fire trails and classification of trails according to current codes of practice and requirements under the *Environment Protection Act 1997*

For works within the Canberra Nature Park the relevant management objectives in the *Canberra Nature Park Management Plan 1999* are:

- Protect life and property from fire while not compromising the values of CNP.
- Protect the natural and cultural resources of Canberra Nature Park and adjacent areas from inappropriate fire regimes, including ecological burns and fire suppression activities while promoting natural processes.

There is currently no Plan of Management for the Lower Cotter Catchment.

Maintenance of fire trails is required to be undertaken in accordance with the Government commitments made under the Strategic Bushfire Management Plan. Maintenance of fire trails to an agreed standard will assist in the protection of life and property, help minimise the impacts of hazard reduction and fire suppression activities, and aid in the protection of natural and cultural resources from the impacts from wildfire.

There will be a short term local visual impacts due to the vegetation clearance but the works will give a substantial advantage in controlling fire and will help protect the conservation estate from the impacts of wildfire. In the event that a fire does break out, the intensity is likely to be much lower in these cleared areas allowing fire suppression activities to be more effective.

The removal of the vegetation will allow for emergency vehicle access for general operational and fire suppression activities and use the existing trail network to create strategic containment lines in case of wildfire. It will also reduce the threat of vehicle entrapment from burnover due to radiant heat from vegetation encroaching on the trail, and increase crew safety by creating better driver line of sight at road corners, turns and intersections. The treated trails will also be used to prepare and 'sure up' containment lines for the hazard reduction burn program.

Potentially Significant Environmental Impacts

Although this work is being undertaken within areas previously disturbed by the construction of the trails, it still has the potential to impact on cultural sites and rare and threatened fauna and flora. Maps and tables have been submitted showing the location and details of all known occurrences within a prescribed distance of the fire trails. The tables were produced using GIS data held by the Parks and Conservation Service and the Environment and Planning Directorate.

There are 134 sites of significance; of these 83 are cultural heritage sites and 51 flora and fauna sites.

It is noted that the data for the location of these sites was not recorded to an accuracy of 2 metres when it was collected. Therefore a buffer of 10 metres was used for cultural heritage sites and 100 metres for fauna and flora sites. Until these sites have been inspected in the field it cannot be determined whether they actually

occur within the zone of impact of the slash busters and protocols have been developed to ensure that the likelihood of any impact on these sites is reduced.

Impact of development on these values (including offsite impacts)
It should be noted that with older data there are concerns about the spatial accuracy of the information. However, protocols have been developed to assess, and if necessary, manage the impact on these sites. All identified significant cultural and environmental sites will be assessed in the field, and if required, an exclusion zone marked out.

The management of the vegetation using the slash buster means that there is no ground disturbance and that the operator can selectively clear vegetation and therefore work to specific directions. These directions will include not disturbing areas of cultural and environmental significance and a suitable buffer.

No habitat trees or trees with a trunk diameter of 20 cm (10 cm for snow gum) or greater are to be removed, especially those trees that contain hollows or are standing dead trees.

Provided all works are in accordance with the agreed protocols, then the potential for significant environmental impacts is reduced.

The Agreed Protocols are:
Ecological significant sites

1. All proposed treatment areas are to be intersected with spatial data for known locations of protected plants and threatened fauna records to establish possible impacts sites and an appropriate buffer applied. A buffer of 100 m is recommended due to accuracy and age of some locations recorded. This is to be interpreted to mean that where a record does not appear to be on a fire trail, but is within 100 m of a fire trail, that the mid-point of an intersection between a 100 m buffer of the grid reference and the fire trail be treated as the grid reference point;
2. Spatial data to support the intersect analysis must be provided by Conservation Research (EPD) to ensure most up to date data are used.
3. All sites where a protected or threatened species overlaps with the treatment area or buffer must be inspected in the field by a trained botanist. Site inspection should extend along the road at least 100 metres either side of the indicated GPS co-ordinates and a minimum 5 metres in from the road edge.
4. If the species / habitat of concern occurs within 5 metres of the edge of the fire trail pavement, and therefore within the working zone and potential impact zone of the slash buster the contracted botanist will determine its distribution at the site and the boundary will be buffered by 50 metres.

5. It is suggested that in the event that no protected species are located at inspection sites at the time of inspection a 50 metre buffer be established at the GPS co-ordinates in any case. The timing of surveys may not be ideal for location/identification of target species.
6. Within this identified buffer area CP will advise whether vegetation control is possible (and if necessary determine restrictions) or should be excluded.
7. All buffers will be marked in the field and the slash buster operator shown each location.

Cultural heritage sites:
a) will be located by Fire Management Unit staff supervising the slash buster using a GPS and the co-ordinates generated by the output from the GIS;

b) border markers and hut ruins will be buffered by 20 metres and no vegetation control will be undertaken within the buffer;

c) the precautionary principle will be adopted for Aboriginal sites. It will be assumed the site is present even if physical evidence cannot be found.

d) Aboriginal sites will be buffered by 50 metres. Within this buffer vegetation will be reduced to a minimum height of 300mm to avoid ground disturbance.

e) All buffers will be marked in the field and the slash buster operator shown each site

It is recommended that in addition to detailed site inspections of known protected species, the entire length of the treatment areas be inspected in high conservation value areas to look for species and habitat of concern. Existing records are known to be incomplete and of variable coverage, especially in more remote parts f the PCS estate.

It has been determined that if the works are undertaken in a manner consistent with the above conditions attached to the ESO, they are unlikely to cause a significant adverse environmental impact.