Australian Capital Territory

Planning and Development (Conditional Environmental Significance Opinion – Bushfire Trail Vegetation Management Works within the ACT's Conservation Estate) Notice 2017

Notifiable Instrument NI2017–337

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 (Conditional Environmental Significance Opinion – Bushfire Trail Vegetation Management Works within the ACT's Conservation Estate) Notice 2017.*

2 Conditional Environmental Significance Opinion

(1) On 7 June 2017, the Conservator of Flora and Fauna, pursuant to section 138AB(4) of the *Planning and Development Act 2007* (the **Act**), gave the Applicant a conditional environmental significance opinion in relation to bushfire trail vegetation management works within the ACT's conservation estate.

(2) In this section:

Conditional environmental significance opinion means the opinion in the schedule.

Note Under section 138AD(6) of the Act, the conditional environmental significance opinion and this notice expire 18 months after the day the notice is notified.

Ben Ponton
Chief Planning Executive
13 June 2017

ENVIRONMENTAL SIGNIFICANCE OPINION

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

APPLICANT

ACT Parks and Conservation Service, Environment Planning and Sustainable Development Directorate, as represented by Neil Cooper, Manager, Fire, Forests and Roads.

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 approximately 146 kilometres of fire trail within the ACT's conservation estate that is managed by the Parks and Conservation Service (PCS). 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.

LOCATION

Numerous blocks within the conservation estate including within Namadgi National Park, Bullen Range Reserve and Woodstock Nature Reserve.

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 following conditions, 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.

- The tritter will not treat known weed patches within a proposed treatment area, unless the weeds have been chemical sprayed in advance of the treatment, are dying or dead and free of seed, and there is follow up spray with a suitable chemical to destroy the weeds.

- Prior to tritter work commencing in a new area, the alignment will be inspected and all weed patches recorded using a GPS and the information provided to the Senior Weeds Officer, PCS. Flagging tape to be installed to alert the operator (to be removed at the completion of works in that area). Appropriate weed control to be implemented in accordance with the above condition. Weeds of concern include: African Love Grass, Serrated Tussock, Chilean Needle Grass, Sweet Vernal Grass, Sulphur Cinquefoil, Nodding Thistle, Vipers Bugloss, Birds-foot Trefoil and St. Johns Wort.

- Follow-up chemical application which occurs after the tritter to suppress initial stages of regrowth will also treat any weeds (with suitable chemical) within and immediately adjacent o the treated area. GPS records of the patch size to be updated and provided to the Senior Weeds Officer, PCS.

- Any patches of weeds observed outside of the specific operations applied for in this application will be reported to the Senior Weeds Officer for appropriate action by PCS District offices.

- Long runs of trittering (exceeding 1km) are likely to be broken by the presence of significant trees or other protected vegetation. Where this does not occur there is to be a break in treatment (as long as the road remains within specification and no safety concerns exist) to provide a buffer to the uninterrupted spread of weeds.

Attached is a Statement of Reasons for the decision.

Dr A. Lane
Conservator of Flora and Fauna

7 June 2017

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(a) development that may impact on a species or ecological community that is endangered, a species that is vulnerable; protected; or has special protection status;

Namadgi National Park contains:

Two communities listed as endangered:

- 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).

Twelve 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

Two plant species listed as threatened

- Gentiana baeuerlenii (a sub-alpine herb); and
- Corunastylis ectopa (Brindabella Midge Orchid).

Part 4.3, item 2(a) the clearing of more than 0.5ha of native vegetation other than on land that is designated as a future urban area

The proposal will impact on 58ha of native vegetation.

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

Works are within Namadgi National Park, Bullen Range Nature Reserve and Woodstock Nature 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 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 development proposal is for vegetation management on the sides of approximately 146 kilometres of fire trail within the ACT's conservation estate that is managed by the Parks and Conservation Service (PCS). 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, or to the outside of road drainage structures. Some areas will be treated up to 4.0 m in depth at sharp bends and switchbacks to further improve sight lines at these conflict points. The minimum height of vegetation after treatment will be 100mm.

Spot spraying using a chemical that targets woody species will be undertaken on the treated vegetation to prolong the time needed between treatments.

Documentation Submitted

- ESO Supporting Statement – Mechanical Vegetation Removal on Fire Trails (2016-17);
- Supplementary information;
- Schedule of Blocks;
- Numerous maps showing location of works;
- Numerous photos of Mt Franklin Road showing location of works;
- Form 1M.

Natural conservation values present

Namadgi

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 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*

The works will pass through areas of habitat for a range of fauna species though no species are expected to be impacted as they will be able to move out of the works area. The areas to be treated are also areas that were previously disturbed by the construction of the trails and are frequently disrupted by vehicle passage. The ground layer of vegetation will be maintained allowing for sheltered passage to the road edge for small vertebrates.

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.

No works are proposed in these communities.

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.

No works are proposed that will impact on the wetlands.

Bullen Range

On the eastern fall down to the Murrumbidgee River the forest is tall open forest dominated by Yellow Box (*Eucalyptus melliodora*) along with Blakely's Red Gum (*Eucalyptus blakelyi*). The understory is Long-leaf Lomatia (*Lomatia myricoides*), acacia's and *Eucalyptus cinerea ssp. triplex* on the upper slopes. At the base of the

slope adjacent to the Murrumbidgee there is open Box-Gum Woodland, noting that no works are required in this location as the woodland is open.

On the western fall the forest is mid open forest dominated by Red Stringybark (*Eucalyptus macrorhyncha*) along with Scribbly Gum (*Eucalyptus rossii*) in sunnier locations. Understorey is Long-leaf Lomatia (*Lomatia myricoides*) and acacia's with occasional tussock grasses in more open locations.

Limited works are required along the ridge top in the vicinity of the Power line Track intersection. This area has poor soils which supports a mid open forest of Broad-leaved Peppermint (*Eucalyptus dives*) and Mealy Bundy (*Eucalyptus nortonii*).

Woodstock Nature Reserve
The vegetation along Georgios Rd is low open shrub land, dominated by tea-tree's, Burgan (*Kunzea ericoides*) and Slender Tea-tree (*Leptospermum brevipes*), and broad leaf Acacias, with River She-oak (*Casuarina cunninghamiana*) in the sandy soils immediately adjacent to the Murrumbidgee. Black Cypress Pine (*Callitris endlicheri*) is located in one isolated patch on a rock-clay outcrop. There is the occasional Red Stringybark (*Eucalyptus macrorhyncha*) on the better drained soils.

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 Bullen Range Nature Reserve and the Woodstock Nature Reserve the relevant plan of management is the *Murrumbidgee River Corridor Management Plan 1999.* The relevant management objectives are:

- To protect life and property.
- To minimise the impacts of hazard reduction and fire suppression activities;
- To protect the natural and cultural heritage through the use of ecological burns;

- To protect the natural and cultural features of the Corridor from damage by fire; and
- To protect soil stability and ground cover.

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 the use of 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. To reduce the potential to impact on these sites protocols have been developed including onsite field assessments by an ecologist, and the implementation of exclusion zones where appropriate.

Where there is likely to be impacts on fauna species which nest on roadsides, the timing of works will be adjusted to prevent destruction of nests during breeding seasons. If the timing cannot be adjusted for operational reasons, and it is likely that the works will affect roadside fauna, then pre-works surveys will be undertaken with Conservation Research ecologists and buffer zones established around active nests that will be later re-worked with hand crews.

Rare Plants

Many plants either listed as threatened nationally, in NSW or the ACT or which are rare in the ACT have been recorded close to or within areas of proposed trittering.

Species of particular concern have been listed in the tables below. The list does not include species now known to be reasonably common in the ACT or grass and some herb species that are unlikely to be adversely impacted by the proposed activity. It should be noted that indirect impacts to these species could occur as a result of altering local habitat conditions or spray drift from the use of chemical spray to control woody regrowth – hence the need for a reasonable buffer area around the plants.

Location	Significant plant species for which protocol applies	Other comments conditions
Georgios Road – Woodstock nature reserve	• Murrumbidgee Bossiaea (ACT endemic + listed as nationally vulnerable • *Adriana tomentosa* (Not recorded by Georgios Road, but the part of the ACT is its local stronghold), with an ACT population probably of less than 500 plants. It is a distinctive and work areas should be checked for it prior to work beginning, with any plants left in situ	Only areas which do not meet fire fuel specifications are to be treated. Standard practices for significant plant identification and avoidance, and vehicle hygiene to be implemented. This area has a high infestation of African Lovegrass, weed management measures as outlined above will need to be implemented to prevent the dispersal of weeds or the expansion of the extent of weeds.
Roads in Tennent district	• Although some rare plants appear in the protected plant layer, a recent revision suggests that Yam Daisy and Hill Fireweed are more common than originally thought, and thus don't need particular management focus	About 1km of proposed works in Tennent Blocks 98 and 124 are outside of the Reserved area but contains endangered Box Gum Woodland. To prevent the spread of Lovegrass, Serrated Tussock, St Johns Wort and other weeds from the rural lease into the reserve, trittering should be in direction that moves from the reserve to rural lease. Birds-Foot trefoil has been recorded in this area it should be avoided
Cow Flat Road Burkes Creek Road	• Dicksonia antarctica (small total population in the ACT)	Standard practices of searching for tree ferns prior to works to be undertaken by PCS staff and the spotter, with these plants being flagged.
Fishing Gap Fire Trail	• *Blechnum cartilagineum*: Gristle Fern (small ACT total	Prior to works in this location, PCS is to make reasonable efforts to

	population) • *Bunochilus montanus:* Montane Leafy Greenhood (nationally rare) • *Diplodium hamiltonianum:* Yellow Hyacinth Orchid (only known from 4 locations in the ACT • *Pterostylis curta*; Blunt Greenhood (a data deficient species)	contact Mark Clements of the National Herbarium (CSIRO) whether 1990 observation of Yellow Hyacinth Orchid was on the roadside of Fishing Gap Fire Trail. Standard practices of searching for tree and other ferns prior to works, to be undertaken by PCS staff and the spotter, with these plants being flagged. Modern records exist for *Bunochilus* and *Pterostylis* Greenhood's, the area around records for these plants to be searched and/or buffered in accordance with standard practice.
Mt Franklin Break Fire Trail	• *Myosotis exarrhena;* Sweet forget me not (Mt Franklin is only known recent ACT location) • *Parantennaria uniceps* • *Pimelea ligustrina* • *Podocarpus lawrencei*: Mountain Plum Pine • *Prasophyllum montanum*: Mountain Leek Orchid • *Ranunculus millanii;* Dwarf Buttercup	A number records of protected plants exist in the vicinity of Mt Franklin Break Fire Trail. Forget-me-not and buttercup are perennial plants, while Parantennaria is a mat forming herb, the Pimelea and Podocarpus are shrubs. All are to be searched for prior to work commencing with appropriate buffers put in place. The Leek orchid is a recent record and should be accurate. Areas of infestation of Sweet Vernal Grass need to be treated in accordance with the controls identified above or otherwise avoided.
Pipeline Road	• *Bunochilus montanus:* Montane Leafy Greenhood	Bunochilus records are recent and accurate, appropriate buffers around this site to be implemented. Phytopthera has been recorded outside of the National Park in Pierces Creek Forest. If the tritter works within the buffer zone around the known Phytopthera area, then full washdown must be undertaken in accordance with established procedures. If there is

		uncertainty as to the effectiveness of the disinfection, the machine must not proceed into the National Park.
Warks Road	• *Gleichenia microphylla*; Scrambling Coral Fern (<100 plants in the ACT)	Standard practices of searching for tree and other ferns prior to works to be undertaken by PCS staff and the spotter, with these plants being flagged.
Blue Range	• *Dicksonia antarctica* Soft Tree Fern • *Cyathea australis subsp australis.* Rough Tree Fern • *Blechnum cartilagineum*: Gristle Fern • *Histiopteris incisa;* Bat's Wing Fern (small ACT population) • *Diplazium australe :* Austral Lady Fern (Only one known ACT location) • *Veronica grosseserrata;* Eastern Speedwell	Standard practices of searching for tree and other ferns prior to works to be undertaken by PCS staff and the spotter, with these plants being flagged. Speedwell is a 1960 record, but as a perennial species should be searched for.
Bullen Powerline Road	• *Grevillea ramosissima subsp. ramosissima;* Fan Grevillea (<500 plants in the ACT) • *Muehlenbeckia tuggeranong;* Tuggeranong Lignum (endangered ACT endemic)	Translocated plants are all noted as having failed. No works will be undertaken in the grassland.
Bendora arboretum Link	• *Gleichenia microphylla*; Scrambling Coral Fern (<100 plants in the ACT)	Standard practices of searching for tree and other ferns prior to works to be undertaken by PCS staff and the spotter, with these plants being flagged.
Mt Franklin Road	• *Gastrodia entomogama:* Brindabella Potato Orchid (endemic to Brindabellas only known from a few locations all with only a handful of plants) • *Hymenochilus clivicola;* Mountain Black-tip Greenhood • *Grevillea diminuta(*endemic to Brindabellas)	Potato and Greenhood orchid records are recent and accurate. Appropriate buffers to be established around these plants. *Grevillea diminuta* may be locally abundant along Mt Franklin road, but this is the stronghold of its restricted distribution. Plant should

	• *Chionogentias muelleriana subsp jingerensis:* Mainly known from ACT-NSW border • *Craspedia aurantia:* Orange Billy Buttons • *Epacris petrophilla:* Snow Heath (only two recent ACT locations) • *Gleichenia dicarpa;* Coral fern • *Hakea lissosperma;* Mountain Needlewood (Restricted in the ACT population size unknown) • *Oreomyrrhis argentea*: Silver Carraway (only 3 known ACT locations) • *Parantennaria uniceps* • *Pimelea ligustrina* • *Podocarpus lawrencei*: Mountain Plum Pine • *Prostanthera phylicifolia:* Spiked Mint Bush	be searched for and avoided. It is noted that wetlands, grasslands and low herb fields are not trittered. Epacris, Coral Fern , Hakea, Oreomyrrhis, Parantennaria, Pimelea, Podocarpus and Prostanthera to be searched for and avoided. Standard practices of searching for tree and other ferns prior to works to be undertaken by PCS staff and the spotter, with these plants being flagged. Infestations of Sweet Vernal Grass and Vipers Bugloss should be treated or avoided in accordance with weed management procedures.
Gilmores Road		Works should move from South to North on this road to avoid weed invasion from the rural area. Standard procedures for weed control should be implemented.
Burnt Hill and Long Flat		There is a large infestation of Sweet Vernal Grass in this area as well as infestations of Nodding Thistle and Vipers Bugloss that need to be avoided or treated. Standard procedures for weed control should be implemented.

It has been determined that provided all works are undertaken in a manner consistent with the documentation submitted in support of the ESO; the established protocols for vegetation removal within the conservation estate; and the following conditions regarding weed control; they are unlikely to cause a significant adverse environmental impact.

- The tritter will not treat known weed patches within a proposed treatment area, unless the weeds have been chemical sprayed in advance of the

treatment, are dying or dead and free of seed, and there is follow up spray with a suitable chemical to destroy the weeds.

- Prior to tritter work commencing in a new area, the alignment will be inspected and all weed patches recorded using a GPS and the information provided to the Senior Weeds Officer, PCS. Flagging tape to be installed to alert the operator (to be removed at the completion of works in that area). Appropriate weed control to be implemented in accordance with the above condition. Weeds of concern include: African Love Grass, Serrated Tussock, Chilean Needle Grass, Sweet Vernal Grass, Sulphur Cinquefoil, Nodding Thistle, Vipers Bugloss, Birds-foot Trefoil and St. Johns Wort.

- Follow-up chemical application which occurs after the tritter to suppress initial stages of regrowth will also treat any weeds (with suitable chemical) within and immediately adjacent o the treated area. GPS records of the patch size to be updated and provided to the Senior Weeds Officer, PCS.

- Any patches of weeds observed outside of the specific operations applied for in this application will be reported to the Senior Weeds Officer for appropriate action by PCS District offices.

- Long runs of trittering (exceeding 1km) are likely to be broken by the presence of significant trees or other protected vegetation. Where this does not occur there is to be a break in treatment (as long as the road remains within specification and no safety concerns exist) to provide a buffer to the uninterrupted spread of weeds.

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.