



**LEGISLATIVE ASSEMBLY**  
FOR THE AUSTRALIAN CAPITAL TERRITORY

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STANDING COMMITTEE ON ENVIRONMENT, CLIMATE CHANGE AND BIODIVERSITY  
Dr Marisa Paterson MLA (Chair), Ms Jo Clay MLA (Deputy Chair), Mr Ed Cocks MLA

## Submission Cover Sheet

Inquiry into ACT environment's Bushfire preparedness

**Submission Number: 7**

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## **Neil Cooper (PSM, MIFA)**

### **Background:**

I have been recognised for my enormous contribution and legacy to fire and forestry management at the local, national, and international levels. **From 2005 through to 2021, I was the Senior Director of Fire Forest and Roads with the ACT Parks and Conservation Service (ACT PCS)** in which time we elevated the fire culture and expertise to be among the best in Australia.

As a highly credentialled Level 3 incident controller and fire manager, I have led teams in responding to and managing the Blue Mountains Fires in 1984 and major Canberra fires in 1991, 2001 and 2003 – as well as the 2020 Orroral Valley Fire and the 2019 NSW South Coast Currowan Fire. I have also been deployed to wildfires in the US and Canada on multiple times and in senior roles.

My skills and knowledge of fire behaviour and fire management are widely acknowledged locally, nationally and internationally. I led an inquiry into New Zealand's biggest wildfire event (Nelson Fire) as well as an inquiry into the 2020 K'gari (Fraser Island) fire. I am currently working with the Quandamooka Yoolooburrabee Aboriginal Corporation (QYAK) on aboriginal fire management and planning across Minjerribah (North Stradbroke Island).

I built and led a world class program in fire management in the ACT that was recognised across the country as the benchmark. My contributions and commitment to protecting the community and environment from the effects of unplanned fire have been recognised with numerous medals and awards including the 2010 Public Service Medal (PSM) and 2003 ACT Emergency Medal. I was the first ever Australian to be honoured with the International Association of Wildland Fire (IAWF) Firebreak Award for Excellence in Wildland Fire Management (2020) in recognition of the team and culture that I had established, nurtured and developed at ACT PCS.

I have always been a passionate advocate for the ACT PCS, the multiple values of our managed commercial forests, land management and the importance of using fire as a land management tool.

I filled a role as Director on the Board of Australasian Fire Authorities Council (AFAC) from 2012 to 2021 and was instrumental in ensuring the interests of land managers across the country were represented. Between 2012 and 2021 I also filled the role of Chair of the Forest Fire Management Group (FFMG - a sub-group of COAG) and remain a key member and advisor for Forestry Australia on their fire management group.

In 2021, after 38 years in ACT land management, I moved to a consultancy with the CSIRO National Bushfire Intelligence Capability (NBIC) programme, aimed at implementing some key recommendations from the Royal Commission report into the 2019/20 Black Summer fires.

- Chair of the Forest Fire Management Group (FFMG) (2012 -2021)
  - Sub committee under the Ministerial Council – sets standards for all fire management across Australia and New Zealand and advises the Forest and Forest Products Committee on all fire issues
- ACT representative (2007 – 2021) on Commonwealth Forest and Forest Products Committee (FFPC) that sat under the Primary Industry Ministerial Council (PIMC)
- ACT representative on Australasian Fire Authorities Council (AFAC) (2005-2021)
- Director on the AFAC Board from 2012-2021.

- Director on AFAC Audit and Risk Committee
- Steering Group Deputy Chair - the National Planned Burning Project (2015 – 2021)
- Deputy Chair, and AFAC Board sponsor, on the AFAC Rural Land Managers Group.

#### RECOGNITION AWARDS:

- **1977-1982- Bachelor Science (Forestry)** at the Australian National University,
- **1985 - Canberran of the Year** – awarded to the ACT Firefighter,
- **1990 - National Emergency Medal (plus first bar in 2010)** – for more than 35 years service in an area that “presents personal risk”
- **2002 - Silver award in the Prime Ministers awards for excellence in Public sector management** – awarded to the management team for the significant structural “Reform of ACT Forests”.
- **2003 - Directors Commendation for Exemplary Service** – personal award for “courage/leadership/professionalism/innovation and integrity during the 2003 fires.”
- **2006 - Institute of Foresters Service Award** – personal award for “Exceptional commitment and dedication to the restoration of the plantation in the difficult and challenging environment that followed the post 2003 fires.”
- **2006 and 2008 – Overseas deployments to US fires** – became the first ever ACT representative to be selected to be part of an overseas firefighting contingent.
- **2007- Personal medallion from the Secretary of The Department of the Interior of the United States of America** – for leading an Australian/New Zealand contingent to assist in wildfires in the United States in 2006
- **2008 - Commission of Public Administration Gold award** – for personal “professionalism, leadership and commitment.”
- **2009 - Institute of Foresters of Australia - ACT Forester of the Year**
- **2010 – Australian Public Sector Medal (PSM) in Australia Day honors** – for outstanding public service in the field of improved fire management programs for the ACT
- **2010 - Represented Australia and presented a paper on the *Australian National Bushfire Policy Statement*, at the United Nations Committee on Forestry (COFO) meeting in Rome in October 2010** – presented a paper on fire, research and climate change to an audience of over 170 separate countries.

- **2010 – 2018 Lead-end-User for the Bushfire Co-operative Research Centre (BCRC) -** selected as one of the six national Lead-End-Users for the BCRC in a role that was the critical link between national research and the operational end user
- **2012 – nominated to represent Australia at the Asia Pacific Forestry Forum in Beijing China**
- **2012 – 2021 Chair of the Australian/New Zealand Forest Fire Management Group**
- **2012 – Represented Australia (and presented) at the New Zealand Research Forum in Rotorua in June**
- **2012 – Represented Australia (and presented) at the United Nations Committee on Forestry (COFO) meeting in Rome in October 2012 – presenting a paper on fire risk and land management responsibility.**
- **2014 – Co-author of *National Bushfire Management Policy Statement for Forests and Rangelands* – successfully negotiated bi-partisan agreement/endorsement from the Premiers and Chief Ministers from every State and Territory as well as the Australian Prime Minister.**
- **2015 – Represented Australia at the North American Forest Fire Working Group meeting in Gatlinburg Tennessee (USA)**
- **2017 – International Liaison Officer for largest ever Australian Fire deployment - Canada.**
- **2017 - Represented Australia at the North American Forest Fire Working Group meeting in Winnipeg Canada**
- **2019 - Represented Australia at the North American Forest Fire Working Group meeting in Guadalajara Mexico**
- **2019 – Subject Matter Expert - Prepared and delivered a post incident report on a major fire in Nelson NZ**
- **2021 - Subject Matter Expert - Prepared and delivered a post incident report on a major fire on K'gari (Fraser Island) in Queensland**
- **2021 – current. Commissioned by CSIRO to deliver the multi-million-dollar National Bushfire Intelligence Capability framework across Australia – an outcome of the Royal Commission inquiry into the 2019/20 fires.**

## Parliamentary Inquiry

This is the link to the details of the inquiry is:

<https://www.parliament.act.gov.au/parliamentary-business/in-committees/committees/eccb/inquiry-into-the-act-environments-bushfire-preparedness>

### **Inquiry into the ACT environment's bushfire preparedness.**

#### Terms of Reference

The Committee will inquire and report on the ACT's bushfire preparedness with particular reference to:

- A.** The environmental factors contributing to bushfires in the ACT and surrounding areas, including any role of weather, drought, climate change, fuel loads and human activity;
- B.** The impact of bushfires on climate emissions, climate adaption, and biodiversity;
- C.** Bushfire risk, resilience, and potential impacts, including consideration of the impact of bushfire on the ACT community, wildlife, and flora;
- D.** Management of bushfire risks and bushfire preparedness of ACT parks, reserves and other open spaces, including:
  - i. preparation and planning by government, the community and other entities;
  - ii. current and historical approaches to land management; and
  - iii. the role of cultural land management practices;
- E.** The condition of ACT parks, reserves and other open spaces, including consideration of fuel loads and emergency access;
- F.** Coordination and between environmental agencies and other government agencies in relation to bushfire risk and management;
- G.** Cross-border risks and issues, particularly engagement with New South Wales and the Commonwealth; and
- H.** Any other matters that the Committee deems appropriate in relation to environmental preparedness bushfires. Inquiry into the ACT environment's bushfire preparedness

### **FORMAL SUBMISSION:**

The following submission is based on several high priority issues that I personally feel are impacting effective fire management within the ACT Parks and Conservation Service (PCS) estate. Many of these issues cut across several of the Terms of Reference and it proved too difficult to fit them under a specific ToR. As such I have made each of the issues a section on its own with reference to the appropriate ToR (in the heading) and with some summary observations associated with each section. I trust that this still makes it logical and reasonably easy to follow.

### **1. Prescribed burning is fundamental for bushfire preparedness. (TOR – D, E, F)**

Fire is a part of the natural environment – indeed the Australian ecosystem has evolved in the presence of fire and in the majority of cases requires the presence of fire to remain sustainable and viable (*National Bushfire Management Policy Statement for Forest and Rangelands 2014*). However, fire should be viewed as either “good” fire or “bad” fire. Low intensity patchy fire that burnt in a mosaic across the landscape is generally seen as “good” fire whilst high intensity fires burning into the tops of tree canopies and completely consuming all vegetation in its path is correctly viewed as “bad” fire. The role of the land manager is to restrict fire to the “good” fire category – through effective and broad scale fuel management, an extensive well maintained strategic road access network and maintaining and building sufficient capacity and capability.

Fire management is a fundamental and basic function of land management- the land can not be managed for any other value (ecological, conservation, recreation, forestry, aesthetic, biodiversity, water etc) if fire is not managed first and foremost. Unplanned fire will destroy almost all the other values that we seek from the ACT Parks estate. The responsibility of fuel management must always remain solely with the ACT Parks agency to balance all the values on ACT Parks managed land. The RFS role should remain as auditing implementation.

Prescribed burning is not a simple task – it requires skilled and trained people who know the land and its values and work with the land throughout the year. A poorly implemented burn will deliver poor outcomes both in terms of fuel reduction and in ecological impacts.

The process of implementing prescribed burns is extremely onerous, time consuming and requires a significant amount of dedication and expertise for those proposing and delivering the burns in the field. Extensive planning, involving numerous internal and external environmental approvals, is required before a burn can take place and these often take well over 12 months for the full process. Much of the approval process repeats itself at various stages and utilises processes (Development Applications, Environmental Significance Opinions and Environmental Impact Systems) that are not appropriate for a land manager seeking approval to undertake a land management activity on the very same land that they are tasked with managing 365 days of the year. This approval process also detrimentally impacts road maintenance activities, road side vegetation clearing and other key fire programmes.

However there does need to be a documented process in place outlining the plan and all the issues. In 2014, during my period as FFMG Chairman, the FFMG proposed an initiative that looked at best practice in all aspects of prescribed burning across Australia – the [National Burning Project](#). This project was funded by AFAC member agencies and the Commonwealth of Australia. The project drew upon the expertise of scientists, program managers, burn planners and practitioners from across Australia and documented best practice regarding the strategic, operational, and ecological aspects of prescribed burning. A suite of publications has been produced that provides principles, frameworks and guidance for policy development, program design, burn planning, implementation, and evaluation, including the management of risk.

At the time of the National Burning Project, the ACT was seen as leading the way nationally with the strategic and operational planning. The Strategic Bushfire Management Plan (SBMP) was instigated after 2003 with both Tony Bartlett and me as key drivers. The SBMP has a longer 10-year focus so, to account for the near-time, we then implemented a further addition for the medium term focus on PCS land to cover the 5 year period – the Regional Fire Management Plans (RFMP). The annual operational plans are then the next level down - the Bushfire Operational Plans (BOP). The last level of that national best practice planning is the operational plans for each of the 700+ activities within

the annual BOP. The Operational Plans, BOP and RFMP still remain best practice and I recently utilised this in aboriginal fire management work I am involved in on Minjeribah Qld.

The ACT should look at an approval system that acknowledges the PCS adherence to National Best Practice within the National Burning Project. If the ACT PCS could clearly identify that their process's include all the aspects of best practice through a process of endorsement and accreditation, then there should be an easier more streamlined system to allow timely implementation of prescribed burns across Parks managed land in the ACT. AFAC have since established a National Centre of Excellence for Prescribed Burning (NCEPB) located outside Perth in WA. I have personally presented at this venue on several occasions and have more recently had positive discussions around the idea of the NCEPB undertaking independent external reviews for agencies.

The ACT could lead the way by engaging the NCEPB to undertake an independent external review of the ACT Parks and Conservation Service (PCS) comparing the current PCS practices against the national best practice. If the ACTPCS meets the criteria, then this could be used to streamline the current long and convoluted internal and external process of approvals and result in best practice burning being implemented in the ACT forests in a timely manner.

**Observation:**

**Acknowledge and reaffirm that the responsibility of fuel management including prescribed burning on PCS managed land is the responsibility of the land manager while the RFS remain responsible for auditing of the implementation of that fuel management and burning.**

**1.1 Internal PCS work plan approval processes must be improved and stream-lined to allow timely delivery of essential bushfire management work.**

**1.2 Engage the NCEPB to undertake an independent external review of all the PCS prescribed burning processes against the National Best Practice Guidelines. Review to be undertaken at regular intervals (5 years)**

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## **2. Impact of proposed Human Rights (Healthy Environment) Amendment Bill 2023 introduced to the Legislative Assembly on 26 October 2023 (TOR -B,C, D and F)**

This new Bill is yet to be fully discussed and expanded within the ACT legislative Committee and is scheduled for some time in 2024. The ACT is the first jurisdiction in Australia to consider this issue and should be commended for such forward thinking. However, with this comes the onus to ensure the finer details within the bill provide workable solutions in essential operations areas where there will be obvious conflict – prescribed burning being one.

As it currently reads, the Bill [https://www.legislation.act.gov.au/b/db\\_68569/](https://www.legislation.act.gov.au/b/db_68569/) provides “*express statutory protection for the right to a clean, healthy and sustainable environment in the ACT’s human rights framework.*” There can be no argument to this statement, however the devil is certainly in the detail around definitions (eg what does sustainable mean in this context?) and how we can achieve this whilst also delivering bushfire risk reduction to the ACT and the environment.

This right to a clean, healthy, and sustainable environment, encompasses several substantive elements including:

- clean air
- a safe climate
- access to safe water and adequate sanitation
- healthy and sustainably produced food
- non-toxic environments in which to live, work, study and play, and
- healthy biodiversity and eco-systems.

*“Introducing the right to a healthy environment will ensure environmental and climate considerations feature in public authority functions and decision-making, particularly in the development, implementation, and interpretation of legislation.”*

Prescribed burning can not be undertaken without producing smoke that will impact someone somewhere and have a short-term impact on air quality (first dot point – *Clean Air*). The planning that is undertaken by ACT PCS staff prior to a prescribed burn being implemented is extensive and considerable and a major part is the consideration of the impact of smoke. Detailed analysis is undertaken of predicted weather conditions (both during and post burn) covering wind direction, speed, duration, and thermal lift, along with other factors affecting smoke such as fuel composition and moisture content. Every effort is made to reduce the impact of smoke from prescribed burning, but it can never be eliminated.

Prescribed burning is already a very complex space with an enormous amount of risk and pressure (political, public, internal) on those who are tasked with planning and delivering prescribed burns. The last thing we need to be doing is placing more hurdles and obstacles in the process. This will (and has in other jurisdictions) led to a significant drop in people willing to take on this crucial role.

It is unclear at this early stage, how complaints under this new Bill will be treated, as this level of detail is lacking from the web site. However, during the discussion and implementation of the new Bill there needs to be words to accommodate an exemption for approved and endorsed prescribed burns undertaken by the ACTPCS.



**Observation;**

- 2.1 **An exemption is made under the proposed new Healthy Environment) Amendment Bill 2023 for smoke produced from any ACT PCS prescribed burn that is implemented under an approved and endorsed burn plan.**

### 3. ACT EPSDD and PCS acknowledgment that fire is viewed as “CORE” business (ToR D, E, F and G).

The ACT PCS sits within the EPSDD Directorate which is predominantly focussed on urban planning issues. In my 16 years as Senior Director of the ACTPCS Fire Forest and Roads section I witnessed very little involvement or interest from the senior EPSDD executive in the fire management programme. This was not through lack of trying as I personally presented the fire programme on several occasions to the senior executive team – with little feedback or observed enthusiasm from the executive team.

Even in times of dire events such as the 2019/20 fires there remained a significant distance between the EPSDD Executive and the ACTPCS Fire unit.

Fire management is legislated as the responsibility of the land manager. In the ACT the ACTPCS and TCCS land accounts for nearly 80% of the ACT – under that same legislation, ACTPCS is the responsible entity for fire management over 365 days of the year, in all its forms, across that 80% of the ACT.

Fire remains the highest identified risk to the Territory, as identified in the *Territory Wide Risk Assessment 2017*. In the 23 identified risks, fire and heat-wave are the only two that are rated as extreme. This is expected to only increase as the impacts of climate change are felt across the ACT.

Given that fire is rated as an extreme risk, and that PCS are responsible for preparedness and management of fuels across 80% of the ACT, you would think that fire management would be elevated in the strategic planning and thinking within EPSDD. Ultimately the risk associated with fire on EPSDD managed land, falls on the CEO of EPSDD and his highest risk across his entire portfolio is fire. A recent search of the current EPSDD Strategic Plan identifies “Fire management” as being mentioned twice – one small reference under community protection and the second as a reference to another document. Hardly high-level commitment from the CEO to what should be elevated to a core function of both the Directorate and the ACT PCS.

Prior to my departure from ACTPCS in 2021 we were working on a strategic document for PCS. I have tried to search for this but cannot find it online. At the time we were having difficulty and disagreement around several issues and priorities, and these most notably included the role of fire and its prominence in the PCS Strategic Plan. Fire was not viewed by all senior manager as Core Business however it must be seen as a PCS core function - **nothing else will matter if fire is not managed correctly.**

To deliver a world class fire programme (which was the case in the past for PCS) requires support and a political licence to those delivering the high-risk actions on the ground. This support comes from the agency openly identifying that fire management is a core function – this is not the case at the moment. This support must be open and supportive coming from the Government of the day, the Executive, and from within the agency itself. Prescribed burning is a hard space made even harder by unanswered criticism from politicians, the public and other staff within the agency.

EPSDD and PCS need to have experienced fire people in senior roles to realise when there are impending issues or bushfire related problems. Recommendation 41 (accepted by the ACT Government) from the *“Coronial Inquiry into the January 2003 Bushfires”* was that there needed to be senior fire experienced people within the Parks agency. Once EPSDD identify and acknowledge that fire is CORE business than a detailed study of capacity and capability is urgently required.

Over recent years there has been an exodus of experienced high level fire people within PCS due to retirements and people seeking other job opportunities. PCS may have the capacity in relation to physical numbers of fire trained people, however the capability (skill set) of this capacity is significantly skewed towards the lower end around on-ground fire fighters. While this is not a bad thing in itself and PCS can still supply the majority of the most experienced fire crews in the ACT, there is a major lack of middle to high end people who are capable of filling the essential Incident Management Team (IMT) roles in any major event. The IMT establishes and implements the strategies and tactics to control wildfires. Having no experienced PCS people available to fill these roles will result in non-land managers (Urban fire fighters) determining actions and suppression activities on highly sensitive National Park and wilderness areas with little reference or knowledge around environmental issues that need to be considered. This actually happened in 2019 where it was proposed to place a D9 dozer and use aerial surfactant laden water drops in a highly sensitive area of Namadgi – luckily, I was called in as the Incident Controller and put an immediate stop to both.

In 1992, we undertook a Training Needs Analysis to determine what our fire staff level requirements were and then looked at the current skill set to identify gaps. This then drove the subsequent training calendar and direction. This was repeated in the year prior to my departure however there is some doubt as to whether it has been implemented.

The ACT is a very small jurisdiction. Training can be provided to, and undertaken by, ACT PCS staff however there are very few opportunities for people at the higher levels to gain operational experience in large complex fires. The only way for the ACTPCS to build the experience levels in the high-end functions within the IMT, in a reasonable time frame, is to have a pre-arranged programme and agreements in place to send resources to other larger jurisdictions when they are in the middle of their fire season or their prescribed burning programme. In WA alone, they undertake over 500,000 ha of prescribed burning a year and are always after additional assistance. The ACT could easily send people over in a shadowing role to build their level of expertise which they can then bring back to ACTPCS.

The other opportunity to increase experience within the ACTPCS team is to employ people from other jurisdictions who already have that experience. Unfortunately, the ACT PCS do not do this and continue to employ people in high level fire management positions with little or no previous fire experience. There appears to be minimal desire to remedy this situation with several recent recruitments to senior fire roles being filled by people with zero fire experience. A big part of this is the inability for the ACT to provide attractive remuneration – easily fixed through special agreements that CEO can put in place for the right people or by elevating the positions into executive levels where they should sit.

#### **Observation:**

**3.1 Fire is publicly acknowledged at the highest level as CORE business for EPSDD and ACTPCS.**

**3.2 Highly experienced bushfire staff are recruited to senior roles within EPSDD and PCS.**

**3.3 Mechanisms are set in place to allow movement of senior PCS staff to other agencies to gain high level fire experience**

**3.4 The ACT seriously look at the position levels of senior Fire staff - reassess whether those levels meet industry standard or whether they reflect the experience required and risk tht the positions are responsible for.**

#### **4. ACT PCS are more than a Brigade (ToR D, E and F)**

The ACT RFS currently has 8 Volunteer Brigades plus the ACTPCS Brigade. An effort was made over the past few years to elevate the status of the ACTPCS Fire Unit beyond that of their current status as an RFS Brigade. This may seem a minor issue, but in fact it would have the impact of elevating the ACT PCS to that of a cooperating and collaborating agency working in harmony directly alongside the ACT RFS. The current system gives an impression of subserviency and does not lead to the collaboration and sharing of skills that is needed to effectively manage fire within the ACT.

Unlike the Volunteer Brigades, the ACT PCS are an agency in their own right, with specific legislated land management and fire management responsibilities. A requirement for Brigades under the RFS is to have a constitution, undertake fund raising, an annual general meeting and regular elections of office bearers (including the role of Captain) and to maintain recruitment of volunteers. ACT PCS have no constitution, do no fundraising, have no AGM's, do not have elections, and do not have any volunteers. The role of Captain does not exist within ACTPCS as it is not a fire ground role.

Extensive work was undertaken on RFS/PCS relationships while I was still in the Managers position in ACTPCS Fire management. After some considerable distilling and breaking down of the issues the one key thing that always arose was the fact that ACTPCS are simply viewed as one of the 8 Brigades within the RFS. There is current capacity under existing and current legislation for ACT PCS to become a fire agency working with and supporting the ACTRFS.

The positive impact of this would be to increase the focus around fire management being a key part of core business for the ACT PCS and to consolidate its commitment to working with the ACTRFS. When employed by ACTPCS I developed the current Operational Arrangement (Part A and Part B) which is currently still in place. Part A is the high-level commitment, signed by the heads of Justice and Community Services and EPSDD, for both agencies to work together in a collaborative and cooperative partnership. Part B details the more operational arrangements between the ACT ESA and ACT PCS and includes details around equipment, service levels, training, etc.

#### **Observation:**

**4.1 ACT PCS ceases being referred to as a Brigade and becomes a collaborative fire management agency working with the ACTESA under the guidelines established in the Operational Arrangement.**

**5. Director ACT parks needs to be an approving officer for all forms of development that impact or are adjacent to Parks and reserves in the ACT.**

The ACT is well known as the bush capital – many of the parks and reserves managed by ACT PCS and TCCS interweave within the suburbs and are a result of the gradual development and sprawl of the urban footprint. We saw in 2003 the impact that these ribbons of native vegetation had on fire spread, as these areas acted as wicks where fire progressed deeply into the suburbs and impacted houses many streets back from the direct interface.

The ACT continues to grow and spread, and we push residential housing closer and closer to the edge of parks and reserves. The Planning process around rules and regulations for building, development and setback distances is confusing, complicated, and often leads to perverse outcomes where the fire management issue is ignored and ACTPCS dont have the opportunity to provide feedback and input to the final decision. The outcome is that the responsibility then falls back on the land manager to modify the park or reserve to meet the fire requirements as opposed to options being put in place by the developer to account for fire management. The options can include a requirement for fire trials to be actually established behind houses, significant setback based on slope and wind direction, foregoing some land and retaining as park etc.

A simple improvement should be investigated whereby the Director of ACTPCS has the final approval of any construction that occurs adjacent to ACTPCS managed land. Future land management issues can be addressed with the final outcome being officially endorsed and approved by the land management agency.

**Observation:**

**5.1 The Director of ACTPCS has the final approval on development applications on land adjacent to ACT PCS.**

## 6. Access Fire trails (TOR E,F and G)

Following the 2003 Canberra fires, both the McLeod Review and the Coroner's report were highly critical of the fire trail network and its condition across the National Park and Reserve system in the ACT. It is essential for effective bushfire management that a good strategic network of fire trails is available and maintained. This fire trail system not only provides essential fast access for firefighting equipment but is also provides safety for fire fighters and a place where active burning in front of an oncoming fire may be undertaken.

In the late 1990's there was considerable concern expressed by the ACT Forest agency around the overgrown tracks and trails to the west of the ACT. The issue revolved around the desire from the then Environment ACT, to keep trails to a minimum to ensure the environmental values of the Parks and reserves were conserved. This ethos allowed many essential trails to become fully overgrown and inaccessible. It was a case of fire being considered secondary to (and not equal to) the other ecological park values.

In the 2003 fires, one of the major causes of delay and frustration was the inability for fire crews to gain quick, safe and effective access and to utilise strategic tracks and trails as containment lines. Much of the machinery time in the days following the fire ignition on the 8<sup>th</sup> January was spent opening up trails and undertaking work that should have been undertaken as Preparedness in the years leading up to January 2003.

An extensive detailed and focussed review into the operational aspects of the Canberra Fire was undertaken by Ron McLeod in 2004. Among a number of comments, he made around fire trails, the following (p95) is relevant as it appears to be again becoming an issue - *"the existing road access has been managed in accordance with public expectations concerning the management of such land for its water catchment and conservations values. That may be so, but it is apparent that tracks access in Namadgi National Park has not been managed with fire access in mind."* Many of the McLeod recommendations focussed on access and the need for an effective strategic network of well-maintained tracks and trails – to this end, the ACT Government agreed to provide funds for the Parks agency to engage 2 x Fast attack dozers and a grader.

Unfortunately, it appears that the delivery of road trail maintenance has again reverted to the situation prior to the 2003 fires – history seems to be repeating itself. Many of the tracks and trails remain inaccessible and overgrown and the focus on an effective trail network has decreased to an alarmingly low level. With climate change and expected weather patterns that will produce fire behaviour that we have possibly not expected in the past, it is not the time to fall behind in this critical aspect of fire management. Everyone knows that fast effective initial attack to any ignition is essential to ultimate success and that to do this there is an absolute requirement for good access.

A recent letter sent to the ACT All Hazards Council from the ACT PCS Executive Branch Manager clearly shows a lack of knowledge and understanding around fire access trails and the importance of fast and quick access to any ignition. The first dot point in this response is as follows;

- *As of 21 November 2023, all Namadgi management trails are accessible to emergency and land management vehicles with the exception of the northern end of the Naas Valley Fire Trail (this work is contracted and expected to be completed in January 2024), Left Hand Creek Fire Trail and the Clear Range Fire Trail north of Mt Clear. Each of these trails are a high priority for repair but can be made accessible to tankers by the first attack dozer in the event of a fire.*

The underlined sections (made by me) list a number of fire trails that are all linked and provide access to the southeastern end of the ACT. To suggest (in a high-level response to the All Hazards Council) that this is not an issue, as, in the event of a fire we will spend at least 4 hours of dozer time opening up a 6km stretch of steep access road is remarkably insulting! Again, this was the thinking prior to 2003 and doesn't allow for the fact that a freshly opened steep trail will be barely accessible for repeated traffic from large tankers as the ground will be loose and friable. Plus, the dozers must be used on the fire as first attack and not undertaking access work that could and should have been undertaken in preparation.

The third dot point of that same letter from the ACT PCS Executive Branch Manager, reads as follows;

- *Articulated float vehicles can access the southern Namadgi/Upper Cotter region as far as the Orroral Valley to the north and Ginini gate on Mount Franklin Road from the west. Four-wheel drive fire appliances are then able to access the Bimberi Wilderness via Cotter Hut Road from both directions. Works will continue through the summer of 2023-24 to return permanent rigid float accessibility through the Bimberi Wilderness.*

Again, this appears to show the lack of understanding around the importance and urgency to have this crucial and strategic access road open to rigid float access. This road (Cotter Hut Road from Orroral Valley to Mt Ginnini) runs north/south along the SE edge of the ACT through National Park and wilderness areas. It is seen as a crucial strategic break and as such had a major and expensive upgrade in the year before I retired that brought it to a standard that easily allowed rigid float and tanker access. It is essential to be able to utilise heavy machinery (bulldozers) to effectively implement tactics that will control fires in native forest areas. The stretch of road referred to above is approximately 35 km long and, as it stands now, there is no way of moving heavy machinery to much of the southwestern end of Namadgi. Bulldozers do not "walk" as they are not made for this operation, and it causes excessive wear and tear to the tracks and running gear – so much so that most owners and operators will refuse to do so for more than around 5km.

It is accepted that the rainfall over the past few years has caused some challenges but no more or less than has been the case over the past 30 years. Recent personal correspondence with several current ACTPCS employees has indicated that this road has now been left for so long that it will now require a major upgrade where some interim maintenance may have enabled the basic structure of the road to remain.

A very high-level overview of the 2023 rainfall figures for the area, via the BoM rain gauge at Mt Ginnini, is summarised in Table 1. I have treated any rainfall below 10mm as zero as this will not stop road maintenance although it is accepted that continual rain, especially during the colder winter months will delay activity for longer periods. A high-level overview of the rainfall figures shows there were significant periods of weather where some work, and if not all work, could have been scheduled, implemented, and completed. There were almost 30 consecutive days in January, 30 consecutive days in May, 52 consecutive days in July/August, 20 consecutive days in September, 24 consecutive days in October and 27 consecutive days in December that appear to offer windows of opportunity to undertake the urgent maintenance work. Yet it appears that no work was undertaken on what is arguably the most strategic link road that exists in the ACTPCS estate.

The delivery of fire management works is very dependent on weather. In the fire sector a standard response to not performing or delivering is that it has been "too hot, too cold, too wet, too dry, etc"



to complete the fire management works. It seems the same reasons are being wheeled out again by ACTPCS – with the new addition of COVID related hinderances!

- *Works to repair and maintain management trails in other parts of Namadgi are underway, noting the variability of local constraints and the risk that adverse weather events will impact the ability to complete this work and may cause a reprioritisation of effort.*

*Management trail networks across south-eastern Australia have been severely impacted by the unprecedented alignment of the 2019-20 bushfire season, three extremely wet subsequent years and COVID-19 restrictions. Reinstatement of a resilient ACT fire trail network able to withstand more intense climate driven events will take several years. However, in the meantime, access for emergency and land management purposes will remain the highest priority for resource allocation.*

Table 1: Adjusted Rainfall figures from the BoM for Mt Gininni for 2023 – days recorded less that 10 mm are classed as zero.

Month	Date	Days	Rainfall (mm)
January	1 <sup>st</sup> – 30 <sup>th</sup>	30	zero
	30 <sup>th</sup> , 31 <sup>st</sup>	2	41
February	1 <sup>st</sup> – 14 <sup>th</sup>	14	zero
	14 <sup>th</sup>	1	28
	15 <sup>th</sup> – 28 <sup>th</sup>	13	zero
March	1 <sup>st</sup> – 5 <sup>th</sup>	5	Zero
	6 <sup>th</sup>	1	18
	7 <sup>th</sup> – 22 <sup>nd</sup>	15	Zero
	22 <sup>nd</sup> – 29 <sup>th</sup>	8	110
April	1 <sup>st</sup> – 6 <sup>th</sup>	6	zero
	7 <sup>th</sup>	1	33
	8 <sup>th</sup> – 15 <sup>th</sup>	7	Zero
	16 <sup>th</sup>	1	14
	29 <sup>th</sup> – 30 <sup>th</sup>	2	40
May	1 <sup>st</sup>	1	12
	2 <sup>nd</sup> – 31 <sup>st</sup>	29	Zero
June	1 <sup>st</sup> – 7 <sup>th</sup>	7	zero
	8 <sup>th</sup>	1	28
	9 <sup>th</sup> – 14 <sup>th</sup>	5	Zero
	14 <sup>th</sup>	1	12
	15 <sup>th</sup> – 22 <sup>nd</sup>	7	Zero
	23 <sup>rd</sup> -31 <sup>st</sup>	8	<20
July	1 <sup>st</sup> -8 <sup>th</sup>	8	Zero
	9 <sup>th</sup>	1	24
	10 <sup>th</sup> – 31 <sup>st</sup>	21	Zero
August	1 <sup>st</sup> -31 <sup>st</sup>	31	Zero
September	1 <sup>st</sup> -7 <sup>th</sup>	7	Zero
	8 <sup>th</sup>	1	17
	9 <sup>th</sup> -30 <sup>th</sup>	21	zero
October	1 <sup>st</sup> – 4 <sup>th</sup>	4	zero
	5 <sup>th</sup>	1	64
	6 <sup>th</sup> -30 <sup>th</sup>	24	zero
November	1 <sup>st</sup> -8 <sup>th</sup>	8	zero
	9 <sup>th</sup> h	1	20
	10 <sup>th</sup> -20 <sup>th</sup>	10	zero
	21 <sup>st</sup>	1	17
	21 <sup>st</sup> -24 <sup>th</sup>	4	zero
	25 <sup>th</sup> -30 <sup>th</sup>	5	100
December	1 <sup>st</sup> -3 <sup>rd</sup>	3	54
	4 <sup>th</sup> -31 <sup>st</sup>	27	zero

Road maintenance is costly. The lack of action on the strategic link between Mt Ginnini and Cotter Hut may well be related to insignificant funding by the ACT Government for ACTPCS to be able to maintain all the road network that they are responsible for. The ACTPCS has over 2,500km of rural unsealed roads throughout the forest, reserves and wilderness areas of the ACT, to manage and maintain.

This road network must be treated as a significant Territory asset and funds for maintaining that asset need to be appropriately allocated. I would estimate (guess) the asset valuation for the PCS road network and infrastructure to be more than \$75 million (roughly \$30,000/km). Industry best practice indicates that annual maintenance budget allocation should be around 5% of the capital value – on these very rough figures, for ACTPCS, it would be around \$4 million per year indexed. If nothing has changed over the past 3 years since I retired, the current allocation of maintenance for ACT PCS roads has remained the same and is \$ zero - with all maintenance coming out of the Fire Unit budget allocation and nothing from the Parks section of the agency. There is simply not enough funding for the Fire Unit to be able to effectively manage a major territory asset.

To manage the road network requires skilled machine operators who know the area, are fire trained and are aware of all the constraints and issues around working in some of the ACT's most sensitive areas. Over the past 10 years extensive work was undertaken by the Fire Unit to engage several exceptionally skilled and committed contractor companies who have geared their business to providing a very high-level service to ACTPCS. These contractors were always made feel that they were more than contractors and were part of the team.

The ACT is small, and the pool of suitable contractors is even smaller. During times of emergency, these contractors are the very ones that go above and beyond any written contract, accessing and delivering heavy machinery from across the country along with skilled operators that can operate night and day. This was the exact case in 2019/20 where the ACT would not have been able to find any heavy machinery if we had to do it on our own and the protection of the Corin Ski facility would certainly not have occurred.

However, contractors need to earn a living to keep their business afloat and they require regular and ongoing work to validate their decision to supply a service. This was managed well for over 10 years but more recently, with the loss of experienced road maintenance contract managers within the PCS Fire Unit, seems to now be at breaking point. The ongoing maintenance work on the 2,500 km road network is obviously still there (and increasing) however the operational delivery is lacking and there appears to be little consideration given to the wellbeing and sustainability of contractors and their business.

I have recently received disturbing correspondence from several of the long standing and current ACT PCS Road maintenance contractors that only emphasises this current problem. They are worried that under the current operational regime, with no guarantee of work, they cannot continue to operate sustainably and will have to cease providing a service to ACTPCS. Several key points raised;

- *Forced shutdowns both during and outside the fire season.*
- *Frequent shutdowns for several days or weeks at a time without notice due to not having work signed off.*
- *Advised that they may be shut down altogether out of fire season for up to six months of the year,*
- *ACTPCS not honouring the contract by engaging other contractors outside the contract.*

- *Direct requests from PCS staff to lower the standard of roadwork to save costs.*
- *A significant downgrade in the quality and standards of roading being delivered.*
- *Informed that they are to be stood down from next week for two or more weeks because they can't get work signed off.*
- *Informed to find other work for the next few weeks - impossible with road maintenance work.*

### **ROADSIDE VEGETATION CONTROL**

As already mentioned, a good road network is essential for effective fire management, and this was a key issue that I reported on, as the independent expert witness, in both the Queensland K'gari fire review and the NZ Nelson fire review. However, road maintenance isn't all about the road surface – it must include maintenance of the road verge and shoulder. Vegetation needs to be managed on either side of the road to enable safe access and egress during bushfire and allow the roads to be safely used as possible containment lines utilising backburning operations.

In 2003 a major issue was that roads could not be accessed without brushing against vegetation on each side of the road. The Fire management Unit worked hard and in 2016 developed a programme (Tritter) that allowed a contractor to provide new and advanced equipment that can selectively slash and mulch the roadside shrubs and grasses whilst leaving larger residual trees. It should be noted that this method was preferred, by the Fire Unit, to other, often cheaper but less environmentally friendly, methods used by other jurisdictions (NSWNPWS). These other methods involve driving a 4wd vehicle along the road spraying chemical through a boom to randomly remove all vegetation.

In 2016, a contractor was successfully engaged for “mechanical vegetation removal on fire trail and access roads” on a 3+1+1 contract, that enabled him to purchase the required expensive equipment to undertake the task. This contract enabled work 5 days of the week however since that time this has dropped significantly while at the same time, the requirement for this work to be undertaken in the field has exploded. In a recent conversation with a senior ACTPCS employee, they mentioned to me that “they would not take their vehicle along Mt Franklin Road (a strategic access trail) as there was too much side vegetation scratching both sides of his car”. I also had the opportunity to personally travel into the Namadgi Park via a key access route and experienced the same thing – very dangerous!

Further personal correspondence that I have seen over the past few months paints a very sad picture. The following is a breakdown of the hours spent on essential vegetation management on the verges of roads in ACTPCS.

Year	Hours
2016	3316
2017	2888
2018	1784
2019	2273
2020	338
2021	763
2022	265
2023*	<40

\* From 3rd November 2022 until 21 November 2023, there was no engagement, nor any preventative vegetation management works undertaken.

Unfortunately, the issue around delivery seems to come back to a common theme – lack of approved plans and an internal process that only hinder operational delivery. In the correspondence from the contractor, they mention that “...In January 2022 I was informed that there was no further work for us for the foreseeable future, I was informed that the works planned were held up in the approval process and nothing could be done.” This is even stranger when you consider that the proposed work is generally only several metres on the road verge that would have been significantly altered and modified during the original road construction phase.

Due to the lack of work during 2022/23, the contractor had to terminate their main operator who had spent over 48 years working with the Parks and Forest agency in the ACT. That experience and knowledge can't be replaced. The machine sat for some time, placing extreme pressure on the business. In late 2023 they resumed work to try and open roads up that were overgrown and impassable. The contractor mentions that “roads that had previously in good order, are now overgrown and washed out to a point that if there was even a minor bushfire, crews would not be able to safely access the areas”.

Unfortunately, the ACT was once the leading agency in the region, assisting NSWNPWS with work in their estate as well. However today we see the works that have been undertaken by NSW National Parks and Wildlife in the Brindabella NP, to the west of Canberra being national standard. Over \$1million dollars has been spent in vegetation works and road grading and re sheeting in NSWNPWS areas resulting in all the fire roads being ready in the event of a bushfire. By comparison many roads leading from the ACT into the Brindabella NP are overgrown, washed out or in a state not fit for tanker access. Not a great story regarding cross-border relationships.

#### **Observation:**

- 6.1 A strong effective fire road and access network must be maintained and is critical to effective fire management in both preparedness and in response.**
- 6.2 The fire road and track system within ACTPCS is currently in poor order and needs urgent attention.**
- 6.3 The Fire Unit need to be made clearly responsible for all road maintenance across all ACTPCS managed land.**
- 6.4 Sufficient allocation of funds from the ACT Government is required to manage the maintenance of the multi-million-dollar territory asset.**
- 6.5 Roadside vegetation management is critical to good access -this ACTPCS programme must be reinstated and drastically increased to fill the gap of recent shortfalls and to account for the increased vegetation growth over the past 3 wet seasons.**
- 6.6 Internal approval process for plans needs to be streamlined and with a focus on fire outcomes.**
- 6.7 Contractor management must recognise the small pool of available and skilled machinery operators in the ACT – operational programmes and workflow must be implemented as a priority to ensure these contractors remain available to ACTPCS.**

## **FOOTNOTE!!**

I do not wish to be one of those retired foresters throwing rocks over the fence and into the place I used to work and the place I love. I appreciate that things change over time and procedures develop beyond those that existed during my tenure. I think this is great and shows progression.

I do not, at any stage, doubt or cast dispersions on the commitment and passion of those that work in the ACTPCS Fire Unit, and I share their frustrations around many issues that have festered for more than 20 years within the agency. The Fire Unit is a tough gig where you always seem to be hated by your own conservation agency as well as the public and politicians. The Fire Unit employees continue to deliver their programmes with the limited resources they have and in the face of this constant criticism as they know it is the right thing to do with regard to the environment and to community safety. It is not easy and can wear you down – for this I applaud every single one from the current Director down to the seasonal fire worker.

I do however have some concerns, and this was an opportunity for me to bring them to the fore so they can be discussed, debated and determined as to whether anything can be constructively undertaken to improve the situation.

I provide this information as I am passionate about fire and the environment. Having been through 2 major events in the ACT (2003 and 2019), that had significant implication to the environmental sustainability of the ACT forests and Parks, I want to be part of a process that will hopefully make some good positive changes.

.... and well done if you have read this far!!!!

Thankyou for the opportunity to submit and I am more than happy to meet with the committee at some stage if that was thought to be of any value.

THANKYOU.

Neil Cooper

