



FIRE IN THE SOUTH

A cross-continental exchange

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Cover: The water reservoir within a Ngadju water tree, photo by Dean Freeman



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We acknowledge and thank the traditional owners we met with in Western Australia – the Ngadju, Noongar/Nyungar peoples – their Country and kin.

We acknowledge the Ngunnawal and Ngambri people and their Country where we live and work.

Uncle Karl Brown was our Ween Bidja (fire boss), and sadly passed away during the writing of this report. Our thoughts are with the family. We acknowledge their loss, and the loss to the broader community. We acknowledge his contribution to reigniting cultural burns in the ACT.

We would like to thank all the people who made this trip possible, some of whom we have mentioned in the Introduction. We also thank everyone who gave us feedback on earlier versions of this report, and to Jessika Spencer for help with the photos.

This report reflects the personal opinions of the authors and does not reflect the ACT government's position. Whilst we have endeavoured to check the text with the appropriate people, any errors or omissions are our responsibility.

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Photo: The road ahead, driving east from Perth to Norseman through the fire scarred landscape.



CLAPSTICKS

Noongar elder Eugene Eades gives Dean Freeman some clapsticks to take back to Ngunnawal and Ngambri Country.





FOREWORD

I welcome this report by Jessica Weir and Dean Freeman because it provides additional insight and support for all the work that is being done to redirect government and industry focus to traditional owner fire management knowledge and practices in southern Western Australia. We all need to live and survive together on Country.

It has been exciting to see what our colleagues in northern and central Australia have achieved in getting back to their traditional land management, particularly with a return to traditional fire management. Government has supported many programs, scientists have documented the many benefits, and in some cases companies have paid for the carbon prevented from entering into the planet's atmosphere.

It is now past time to have a similar focus on supporting Traditional Owners in southern Australia to recover their traditional land management roles, to share their knowledge of fire with the wider community, and to play their role in protecting all communities from the wildfires that have become more common. Aboriginal leadership is central, but what is also needed is for the government to embrace Aboriginal Australia and our traditional fire management practices.

Southern Western Australia hosts significant areas of national and international importance - including the Great Western Woodlands where Ngadju kala (fire), and kala management by other Traditional Owners, has protected ancient woodlands for thousands of years. Other important areas include the Fitzgerald Biosphere Reserve and the Walpole Wilderness, Ramsar listed wetlands and the rich coastal heath lands, to name a few. Partnerships between Traditional Owners and federal and state government agencies, local government, industry, scientists and environmental organisations are essential for the survival of these important ecological areas.

We, the Traditional Owners of southern Western Australia, are now starting to be trained in the contemporary resource and environmental management needed in today's world. This work informs and is informed by our traditional knowledge, as we become the scientists, the educators, and the managers. This is a major step towards to our holistic recovery – spiritually, physically, economically and ecologically.

In the case of my people, the Ngadju Nation, our Native Title is across the Great Western Woodland where for some decades now wildfires have become our worst problem. As climate change becomes a bigger threat to our homeland, we have to restore the ancient practices, keep building rapid response firefighting capacity, and strengthen our partnerships with others who are similarly motivated.

It is clear to us that current fire management practices are just not working.



It is now time for the Traditional Owners to be accepted as a key part of land and fire management in southern Western Australia, to resume as much as we can of our traditional roles and cultural obligations.

Bunna Yalunya

(Earth's Good)

Les Schultz
Chair, Ngadju Conservation Aboriginal Corporation
Parru Parru (Norseman), Western Australia

28 February 2019



Mr Leslie Schultz, Cocklebiddy Cave. (Photo: Helen Langley)



EXECUTIVE SUMMARY

This report documents a trip undertaken across southern Western Australia (WA) to exchange knowledge from south eastern Australia about cultural burning with traditional owners and fire authorities in Norseman, Esperance, Nowanup, Albany, Bunbury and Perth. The journey took place in the anticipatory shadow of catastrophic wildfires that can destroy, and have destroyed, much of value in this part of the world.

The key learnings are summarised under the headings: Fire and life, At-risk values, Healing, Cultural burning as a contemporary practice, Volunteer training and fire skills, Relations and repair, and, East-West engagement across southern Australia. We also summarise the presentations by Dean Freeman about the ACT government cultural burning program. Together, these summaries form the substantive content of the report. They are supplemented by anecdotal accounts of each meeting, as well as background information on native title and other key terminology and concepts.

Fundamentally, the Aboriginal people we met with talked about the importance of understanding fire differently, to reposition it as not just something to fear, but as central to the regeneration of life. At the same time, all were concerned about the growth in catastrophic wildfires, and this intensified the focus on anticipatory land management practices.

Within this broader framing, the knowledge exchanged on this trip reflected that:

- Fire management is an intensely regulated space because of the risk that fire presents, and requires much planning, formal training, equipment, and so on. At each meeting, the important collaborative work that this regulatory set up enables was talked about positively in terms of current and future activities. At the same time, regulatory issues were also identified as being unclear and unfamiliar, and thus vulnerable to misinterpretation and incorrect use, including by public sector officials charged with authorising prescribed burning activities. Some of these regulatory matters are detailed in this report.
- Fire management is a dynamic engagement and learning space. Fire brings people together to have very frank conversations about how we live with nature, risk and each other. There is much flux currently about fire management practices, including: the merits of prescribed burning in terms of protecting life and property; the new science about the ecological impacts of hazard reduction burns; and, the role of Indigenous peoples' burning practices.¹ Misunderstandings can derail important conversations because there are such different conceptual traditions and perspectives involved.

¹ Buizer, M., & Kurz, T. (2016). Too hot to handle: Depoliticisation and the discourse of ecological modernisation in fire management debates. *Geoforum*, 68, 48-56.



- Fire management is not simply a technical matter but is about values, and thus it is also political. This includes whose risk mitigation priorities matter, and whose fire management is authorised, funded, and taught. In Australia, this is overlaid with fraught histories of engagement between Indigenous and other people, which Indigenous people have to confront daily. Two societal changes are helping to address these fraught histories. First, the cultural and political resurgence of Indigenous peoples, their rights and responsibilities. Second, the changing values within Australian society to be proud of Indigenous culture, and the importance of addressing historic and contemporary wrongs.

As a consequence of significant societal change to recognise and celebrate First Nations peoples in Australia, British derived systems of governance are required to work with Indigenous peoples' political entities, including partnering on fire management issues. Concomitantly, the public sector and political leadership needs to think closely about what is meant by 'the public good' in their policies and programs – that is, who is the public and what do they consider is good? Whilst northern Australia is an emblematic focus of activity by and for Indigenous Australia, the majority of Australia's Indigenous people live in southern Australia, and with the recognition of native title they are now the largest land holders in southern Australia. The ACT government's support of cultural burning is one example of how fire management is being refashioned with neither land rights nor native title, but motivated individuals doing the work to make it possible, because it is the right thing to do.

Significantly, fundamental shifts in the nature of land holding in Australia are bringing the public sector into greater exposure with the connected thinking and governing systems that arise out of Indigenous peoples' relationships with Country. However, throughout Australia there is much more healing that needs to be done for such intercultural engagement to progress and be more meaningful for Indigenous people, including in material terms. The key players are in a good position to invest in the good will and work that is already present and take this forward.



INTRODUCTION

In September 2018, we travelled across south Western Australia (WA) to exchange knowledge about cultural burning with traditional owners and fire authorities. We also met with many others along the way. The trip generated numerous insights about contemporary cultural burning practice in south-west Australia; and, it was also an opportunity to share and reflect on cultural burning experiences from south-east Australia. This report documents the trip so as to facilitate further conversations and action on cultural burning in southern Australia.

The trip began with an invitation to Ngadju country from Mr Leslie Schultz, Chair of Ngadju Conservation Aboriginal Corporation (NCAC). In discussion, Les suggested we could also take the opportunity to meet with other traditional owners and fire authorities in southern WA and offered help. This included putting us in touch with Noongar elder and Associate Professor Eugene Eades from Nowanup and the non-government environmental organisation Gondwana Link. Gondwana Link assisted with our meetings in Esperance, Nowanup, and Albany, where they have been supporting traditional owner governance, including ranger fire programs with short-term philanthropic funds. Gondwana Link also connected us with Kooyar Wongi Services who organised the Bunbury meeting. Over eight days, we travelled some 2,000 kilometres by road to meet with people in Norseman (Monday), Esperance (Monday), Nowanup (Tuesday-Wednesday), Albany (Wednesday), Bunbury (Thursday) and Perth (Friday). Some of this trip was organised at short notice and we were thus not able to meet up with many traditional owners active in cultural burning issues in southern western Australia.

Although we were unsure about how our presence might be received in different places, wherever we went we were warmly welcomed, for which we were very much appreciative. Our visit was regularly referred to as 'timely' and used to facilitate different parties to come together around cultural burning. Some of the activities we were supported to participate in included awareness raising, making local connections, and securing commitments from fire authorities. Importantly, this trip was not just about sharing knowledge, but ensuring positive change is possible. Also, the time we spent with different individuals and institutions has been of immense value in strengthening east-west learnings and networks, and these continue to be built upon.

Fire is a dynamic land management tradition, a powerful natural force, and a place for meeting, eating and reflecting; it has always held our attention. As this report documents, there are two important social-cultural changes that are refashioning fire practice in southern Australia: the cultural, legal and political resurgence of Indigenous peoples; and, the changing values of Australian society to be proud of Indigenous culture, including addressing historic and contemporary wrongs. These shifts provide grit to the momentum for refashioning regulations and understanding different priorities and viewpoints.

We chose a Ngadju water tree for this report's cover photo to emphasise how fire is connected to so many other values. Ngadju have encouraged these water trees to grow in this shape as an additional water source in the desert. Cultural burning can protect these trees, and catastrophic fires can destroy them. The



water trees are part of the life giving networks of Ngadju Country. Significantly, Country is not just a place, but a way of understanding one's own place amongst others, including relationships of kinship and law. More than geography, Country is a knowledge and governance system set around reciprocal responsibilities, and offers conceptual/material insights to a world increasingly overwhelmed by environmental crises.



LEARNINGS EXCHANGED

KNOWLEDGE SHARED WITH US

Fire and life

- Fundamentally, many Aboriginal people raised the importance of talking about fire differently – away from the mainstream emphasis on fear – to recognise that it is central to the regeneration of life with and within Country, and that working with fire on these terms can have local, regional, national and global benefits.
- Everyone talked about the consequences of large unchecked fires as serious for all lives and all values. Conversations became a lot more complicated when discussing the role of Aboriginal fire management in relation to addressing the risk of large fires.
- Many people discussed the similarities and differences of hazard reduction burns and cultural burns. Cultural burns, as discussed further throughout this report, is a practice that supports Country. It is also a practice that can inform fractured societal debates about the merits of prescribed burning in terms of protecting life and property, and the new science about the ecological impacts of such hazard reduction.²

At-risk values

- All the conversations about better engagement expressed shared and different viewpoints about what is considered at-risk from large unchecked fires. For example, after the primacy of human life, is risk mitigation to protect property (and is that insured/uninsured, commercial/residential, and/or holiday/work property?), community assets (halls/clubs, infrastructure, water/soil health, and/or aesthetic/recreational places?), Aboriginal peoples' values (cultural-historic heritage sites, intergenerational practices, and/or Country in general?), environmental values (ecological communities and/or climate change?), and so on.
- This social and cultural complexity of what is at-risk raises a sweep of questions around the context in which risk priorities are identified, how this then influences the framing of law, policy and regulation, and thus what is considered normal and appropriate in the allocation of resources and risk-mitigation decision making more generally. For example, almost every group we met with identified that fire management norms in southern WA need amending with respect to the native title context.

² Buizer, M., & Kurz, T. (2016). Too hot to handle: Depoliticisation and the discourse of ecological modernisation in fire management debates. *Geoforum*, 68, 48-56.



Healing

- Many people spoke about how fire management is an opportunity for healing Country, healing themselves, and healing fraught relationships, all at the same time. This includes with government organisations. Given the sweep of discriminatory practices where Aboriginal people have been excluded from the governance processes and structures of the Australian colonies and then Federation – for example, ranging from citizenship, electoral and property rights, to being able to decide where to live, who to marry, and to raise one's own children – Aboriginal people have good reason not to trust government authorities. At many of the meetings diverse people came together to speak about this context, and to find better ways to live and work together.

Cultural burning as a contemporary practice

- What a cultural burn *is*, and the relationship between cultural burning and the responsibilities of traditional custodians, was much discussed during the trip. There was no one viewpoint expressed as *the* way to do cultural burns. Different people had different considerations about how cultural burns are, or might be, practiced in their context, including the involvement of non-Indigenous people and Aboriginal people who are not traditional custodians. The distinct leadership and agenda setting role of traditional custodians as the people of Country who speak for Country was often spoken about as paramount, but not always.
- There are always complex intercultural and intra-Indigenous politics about the authority to speak for country. These politics will be part of a cultural burning program. As part of this, at most places gender issues were raised. For example: meeting the different responsibilities for men's country and women's country; and, the role of women in fire management in contemporary and historical times.
- The majority of the Aboriginal people we met with spoke about cultural burns as an important opportunity to come together as a community on country. This is valued as part of looking after country – to learn, practice and pass on knowledge and skills. Thus, cultural burns also support native title rights and interests.

Volunteer training and fire skills

- Participating in volunteer and paid training to gain fire skills was discussed everywhere as part of building expertise for cultural burns, as well as building networks with the fire authorities and others. Training is important because:
 - Aboriginal people have the opportunity to gain valuable experience on fire grounds, as well as with the fire authorities, and gain qualifications that can be used nationally and internationally.



- With more trained Aboriginal volunteers and staff, the fire service agencies gain access to experienced people located often in small rural and regional communities. The fire authorities also gain a greater understanding of the values and priorities of the at-risk community, and networks with those communities.
- Additional to the standard training, it was suggested that the Bushfire Centre for Excellence for Western Australia could extend these win-wins by providing greater access for Aboriginal rangers to their Prescribed Burning courses.

Relations and repair

- Because fire management is about who has authority to manage Country, these conversations concern historical and contemporary land justice issues. Fire authorities and other land managers need to be prepared to have these conversations.
- A recurrent issue raised by Aboriginal people and their non-Indigenous staff and colleagues, was how to improve the relationships between Shire/City councils and Aboriginal people. In regional areas fraught histories of engagement can be entrenched between neighbours across generations. Some issues raised were:
 - Fire training courses for brigades are free and accessible to all, but these are also usually very 'white' spaces and sometimes can be very unwelcoming. Specific activities are needed to address this, starting with investing in relationship building to build common ground, before considering what might be done (for example, course advertisement methods and locations, course content (e.g. in relation to cultural values, sites and practices), course location, and so on). In Norseman, Ngadju established a rural bush fire brigade (see further below).
 - There is confusion about rural fire brigades and shire councils, in relation to whose responsibility it is to do prescribed burning. Risk mitigation is the responsibility of the Shire Councils, and RFBs are trained to do both prescribed burning and bushfire suppression.
 - There was a lack of clarity about whether cultural burns attracted insurance protection from shire councils. A text box has been provided to detail this regulatory arrangement.

South-east and south-west engagement

- Across southeast Australia, Aboriginal people are engaged in forms of cultural burning in places that are not dissimilar to southern WA. These are not 'remote' locations, nor necessarily Indigenous peoples' land holdings, and are places with close urban and rural settlement patterns, with the majority of the local population identifying as non-Indigenous. Critically, this similarity in context offers a different learning space compared to



south-north WA. Everyone we met spoke about the importance of cross-continental learnings.

- The east-west distance is often expressed as logistical and monetary, but there are valuable efficiencies to be gained through knowledge exchange opportunities. It was remarked that travelling east is also a social and cultural issue, in relation to how it is perceived compared with travelling long distances within WA.



ACTPCS PRESENTATIONS AND DISCUSSION

The ACTPCS (Australian Capital Territory Parks and Conservation Service) cultural burning program is an example of cultural burning with Aboriginal staff on public lands. Whilst this is a very different context for many of the people we met with, there was a lot of interest and discussion about what is similar and what is different.

Possibilities

- The fact that the ACT government supports a cultural burning program without the local recognition of native title, nor the granting of land rights, was appreciated as a significant point of difference to the WA context. Indeed, we were regularly asked, “But how is this possible?” To which the response was “through the leadership of key individuals and the support of the community”. The development of cultural burning within the ACTPCS came about when Ngunnawal man and Aboriginal ranger Adrian Brown raised it with ACTPCS Manager Neil Cooper. Out of their leadership, and with others who have since come on board, the ACTPCS has developed a cultural burning program, with one to three cultural burns conducted annually. In this, cultural burns fit within current prescribed burning regulation regimes, as a burning practice alongside hazard reduction burns and ecological burns. No new regulatory system was needed to start the cultural burn program; however, its implementation has been a different matter.
- The ACTPCS program is supported by the ACTPCS Indigenous Fire Management Plan Guidelines and Framework, which sets out the policy and practice priorities step by step. These policy documents are meaningful to the extent that there is a supportive socio-cultural context.

ACTPCS cultural burns and traditional custodians

- Ngunnawal and Ngambri country encompass the Australian Capital Territory (ACT) and parts of neighbouring New South Wales (NSW). Many different people live in this region, including other Aboriginal and Torres Strait Islander people. To date, the ACT has neither land rights nor native title, although there are some land rights lands and land councils in neighbouring NSW.
- In the ACT, the traditional custodians are not funded to be the traditional custodians, with their own governance and land management organisations, although many people have established their own organisations and businesses. This includes working in collaboration with other land managers on cultural burning.
- The majority of Aboriginal people working in the ACTPCS are not traditional custodians, and only two people involved in the actual cultural burns on Country are traditional custodians. The rest of the cultural burning crew is usually comprised of other Aboriginal people. Dean Freeman, who leads the team as Senior Aboriginal Fire Officer, is



from neighbouring Wiradjuri country and has kinship ties with Ngunnawal and Ngambri peoples. Non-Indigenous people are also involved, whether as fire managers, fire crew, land managers, fire behavioural analysts, administrators, ecologists, and so on.

- The traditional custodians have been involved at different stages, including:
 - the initiative for establishing the cultural burning program in the first place;
 - the ACTPCS cultural burning framework was developed in consultation with the traditional custodians;
 - the traditional custodians identify the priority areas to burn;
 - individuals participate as a part of the burn crew; and,
 - it is a priority that a local 'fire boss' lights the cultural burn, although this does not always happen.

Cultural burns as ACTPCS regulation

- A cultural burn can be planned on its own, or as part of a larger fire management plan that may also have hazard reduction burns and/or ecological burns.
- Whatever the purpose, all prescribed burns within the ACT require an individual burn plan, as well as inclusion within the twelve-month Bushfire Operations Plan. They will also have to meet the fire season conditions on the day. Thus, in the ACT cultural burns are part of a layered planning and regulatory context that has limited flexibility. This heavily regulated context recognises the inherent risks of this activity.
- After all the planning, a cultural burn may not go ahead because the fire conditions are not suitable, or because of other community business reasons.
- No matter what the purpose of a cultural burn, it will reduce fuel loads. Whether this reduction in fuel loads meets a government risk-based mitigation program depends on what is considered at-risk, as discussed above, as well as the scale of the cultural burn.
- Beyond the burn itself, the cultural burn program is influencing the regulatory regime. For example:
 - in synergy with ecological burns, cultural burning promotes lighting and burn patterns that allow animals to escape, and protect the canopy, fruit and so on, as compared with the 'making the ground black' goal of hazard reduction burns; and,
 - the program affirms that burning is not just about science, but also values. For example, in the 'outcomes/benefit' section of the ACT government's Burn Plan (Attachment A), a cultural burn is reported as "the continuing commitment to Caring for Country".

Implementing cultural burns

- Cultural burning is something Aboriginal people have always practised and spoken about. The implementation of the ACTPCS cultural burning



program is people and place specific, and is evolving in dialogue with the traditional custodians and with Country.

- At a cultural burn, it is just as important that people are present to share, reflect and learn. It is not just about the fire, but also Elders talking to younger people, community doing business, and so on.
- Cultural burns are also an opportunity for Aboriginal people to get away from racism and bigotry, and feel free and relaxed, connecting with each other and the land.
- If the government wants to call a burn a cultural burn, then Aboriginal people have to be involved from planning to implementation, to support proper processes regarding relationships with kin and Country, including ensuring that cultural protocols are followed and not compromised. Otherwise it is a prescribed burn undertaken by non-Indigenous professionals within their workday as part of their employment duties.
- Some of the lighting and burn patterns being implemented by ACTPCS include:
 - Cultural burns move away from using the drip torch, so as not to put chemicals on the ground, which is especially bad for wetlands. This also lowers the intensity of the burn, which also helps wildlife escape.
 - By burning at a cooler temperature, the fire can be managed to reduce risk as well as manage ecological values. The biggest thing to avoid is the fire going into the canopy: when the canopy is lost, the sun beats down, and plants cannot collect the dew. Also, because cultural burns are cool, the root system is still holding the soil together, which is particularly important for creek banks.
 - Cultural burning lighting patterns include a mosaic of dots that burn out, as well as ensuring breaks in a fire line, to allow for gaps for wildlife to escape. Animals have dealt with this throughout time, so they are very smart about fire, and as soon as they smell the smoke they clear out.
 - Cultural burns do not ascribe to the 70/30 ratio of prescribed burns for burnt/unburnt vegetation.

Skills and mentoring

- A certain level of physical fitness is necessary for all roles, but the ACT experience demonstrates that there are different ways to be involved – e.g. tanker driving, radio communication, and leadership. A good way to match the right people with the right roles is through doing a community audit, which is a strengths-based approach to identifying existing skills in the community.
- Dealing with the bureaucracy and learning new skills can take a long time, and mentors are critical to getting through. Dean spoke about how he had to learn all the elements of the ACTPCS burn plan process in order to be able to lead one (e.g. GIS mapping, weather, fire danger indexes, grass curing, and more). For Dean, it was a matter of persevering, and having good support during that process.



Photo: Some of the Murumbung Rangers with Ngunnawal elder Wally Bell at Gubur Dhaura after a cultural burn. Gubur Dhaura is an ochre mining site, an area of European settler heritage, and a small park on top of a hill in the midst of suburban Canberra. (Credit: ACTPCS).



BACKGROUND

SOUTHERN WA FIRE MANAGEMENT

In such a brief trip, we can only present a very general and limited understanding of the southern WA fire management context.

Across southern WA, some traditional owners have taken the initiative to establish ranger groups, undertake training and access and secure land to support cultural burning activities, including through the recognition of their native title and agreement making. As in south eastern Australia, Aboriginal fire management has been curtailed and suppressed by settler-colonial authorities through direct warfare and the displacement of the governance institutions and lands of the First Nations. Fire management is directly linked to this context and substantial investment in relationship building is required to foster the partnerships needed, including reworking how fire itself is understood.

Currently, State government fire management by the Department of Fire and Emergency Services (DFES) is funded by the Emergency Services Levy on households. Government fire management is shared between the DFES, the Department of Biodiversity Conservation and Attractions (DBCA), and the Shire Councils. This system understands at-risk values through a Bushfire Risk Management Planning (BRMP) process that currently focuses on assets of value to the community categorised as human settlement, economic, environmental and cultural assets. The integration of native title and associated management roles of Aboriginal people will be important for the continued roll-out of BRMPs in Western Australia and are being integrated into the next version of the BRMP Guidelines.

Shire Councils have the statutory responsibilities for bushfire risk mitigation and firefighting operations in gazetted town sites, with DFES supporting the Shires when there is a large bushfire. DFES and the Shire Councils support the formation of volunteer brigades with funding and training, and also contract third parties to conduct bushfire risk mitigation work. DBCA staff mitigate fire risk on crown land reserves outside of gazetted town sites.

In the last eighteen months, the DFES Aboriginal Advancement Unit has implemented two initiatives to support socio-cultural change in policy and practice:

- A cultural governance training course for DFES staff, and
- The development of cultural protocols for each Aboriginal community, to inform DFES staff working in that locality.

To provide further support for bushfire management in a warming and drying climate, a Rural Fire Division has recently been established, as well as a state government Bushfire Centre of Excellence with cultural burning on its agenda.



Text Box: Insurance, prescribed burning and rural fire brigades

Tristan Gulvin, Shire of Collie

Any prescribed burn on Shire of Collie reserves can be done with a sign off from a Fire Control Officer (FCO) and a prescribed fire plan and would be seen as normal duties for any fire brigade as far as insurance goes. To use the appliances on any other land would require sign off from the CEO of the local government as when the insurance was set up this was considered by some to be outside normal duties. See Attachments B and C for the Shire of Collie 'Request for brigade to burn on private property form' and the DFES 'Basic Prescribed Fire Plan' (Basic PFP). The Basic PFP is for local government reserves and small parcels, generally two hectares or less. Anything larger requires a much larger document. Cultural burns can be undertaken in this system as prescribed burns.

The difficulty comes as to who has vesting of the reserve you wish to burn, as you will have to follow that agency's processes. However, the same applies with a brigade just needing to be approved to do this by either the FCO or the Chief Bushfire FCO (BFCO).

FCOs are appointed via Council or CEO endorsement and are generally put up by each Bush Fire Brigade. The Bush Fires Act 1954 Section 38 covers the appointment of Chief BFCOs and FCOs for the purpose of commanding at incidents and issuing of permits. There is a DFES course covering the legal responsibilities of an FCO that can be accessed. There would normally be an FCO for every Bush Fire Brigade at least and most Rangers are FCOs for the purpose of permits, firebreaks and fuel hazard enforcement.

Also, under the Bush Fires Act the FCO would have the right to plan and conduct prescription burns within their area according to a risk assessment. There is a course run for this via a company in Perth, Bushfire Prone Planning which covers off on the nationally accredited course via TAFE.



NATIVE TITLE AND BUSHFIRE RISK MITIGATION IN SOUTHERN WA

Native title is the retrospective and partial recognition of Indigenous peoples' prior and ongoing ownership of the lands and waters of Australia, where native title has not been extinguished. Each recognition of native title is unique according to: the laws and customs of the native title holders, the local land tenure history, and the outcomes of their native title recognition process. Native title holders are required to establish and run corporate bodies (RNTBCs),³ to hold and manage their native title rights and interests, including meeting with others with interests on native title lands.

Native title is not the same as land rights in two important ways, as Weir and Duff explain:

First, statutory Indigenous land rights were created within already familiar categories and concepts of Australian property law, while native title is entirely *sui generis* [Latin for unique], with a different legal status and comprised of different substantive rights compared to forms of property existing under British-derived Australian law. Second, statutory land rights were granted by governments in a deliberate exercise of executive or legislative power; by contrast, native title is recognised as a consequence of judicial decision making without any requirement for governmental action.⁴

Significantly, native title has been accompanied by much legal uncertainty and poor policy alignment. Governments have had to *respond* to the 1992 High Court native title decision, and its development through subsequent court cases. There has also been tension between the Commonwealth, who enacted the Native Title Act in 1993, and the States and Territories who have constitutional responsibility for land and water.

This shift in the nature of land tenure has consequences that are of particular relevance to the land management responsibilities of all landholders – such as invasive species management, soil health, riparian vegetation, and so on. These shifts include:

- Who the landholders are;
- Their legal status (from companies, individuals and government agencies; to now include (largely non-profit and frequently unfunded) communal landholding groups represented by special statutory corporate bodies);
- Their land use activities;
- Their priorities, values and world views, including their motivations for being involved in land management;

³ Registered Native Title Body Corporate, also sometimes known as PBC – the Prescribed Body Corporate before it is registered after the native title determination.

⁴ Weir, JK and N Duff, 2017, 'Who is looking after Country? Interpreting and Attributing land management responsibilities on native title lands', *Australian Journal of Public Administration*, 76(4):426-442, pp.427-8.



- Their available resources – including funding, skills, knowledge, and organizational capacity (noting that these changes are not all necessarily diminutions); and
- Very significantly, the legal rights and obligations they have in respect of the land.⁵

Whether and how bushfire risk mitigation fits within these land management responsibilities requires further policy, legal and research attention. In the interim, law, policy and practice is unclear and disputed. On our trip we heard one anecdote that fire management on native title land had been expressed as no longer a state responsibility, as native title was considered private land. The evidence from invasive species management practice shows that there is a rolling back of WA departmental responsibility with the recognition of exclusive possession native title, and that this occurs without a concomitant transfer of land management funds to the native title holders.⁶

To date, no native title has been recognised in the ACT (in part because of a joint-management arrangement struck for Namadgi National Park); however, and largely because of its land tenure profile (including a lack of land rights legislation), soon the majority of WA will be recognised as native title. Our trip travelled through Country relevant to three significant native title decisions:

- In November 2014, the majority of the Ngadju native title determination was determined by litigation (with the recognition of one small area delayed until July 2017). In 2014, the Federal Court found in their favour that local mineral leases did not extinguish Ngadju native title. The Ngadju determination recognises 120,000 square kilometres of native title, including 45,000 square kilometres of exclusive possession native title. The Ngadju Native Title Corporation is the RNTBC.
- In March 2014, the Esperance Nyungars native title consent determination recognised 29,000 square kilometres of non-exclusive possession native title. This agreement included a five-year direct funding package (\$2.55 million), 25 percent of the annual rental for exploration tenements, and a land package valued around \$24 million. Esperance Tjaltjraak is the RNTBC.
- In October 2018, the South West Native Title Settlement agreement was registered through six Indigenous Land Use Agreements (ILUAs), instead of a native title determination. The settlement involves about 30,000 Noongar people, 200,000 square kilometres of land, a \$1.3 billion settlement package which includes rights, obligations and opportunities in relation to land, resources, governance, finance and cultural heritage.⁷ As part of this, the Noongar people agreed to surrender any native title rights and interests in the area. Applications have been

⁵ Weir, JK and N Duff, 2017, 'Who is looking after Country? Interpreting and Attributing land management responsibilities on native title lands', *Australian Journal of Public Administration*, 76(4):426-442.

⁶ See further Weir and Duff 2017.

⁷ Hobbs, H and G Williams, 2018, 'The Noongar Settlement: Australia's First Treaty', *Sydney Law Review*, 40(1): 1-38.

lodge seeking judicial review of the registering of the six ILUAs, and will likely be heard by the Federal Court before mid 2019.⁸



PHOTO: Shire of Dundas open fires warning signs erected on exclusive possession native title lands. An example of a regulatory matter that requires policy clarification since the recognition of native title.

⁸ <https://www.dpc.wa.gov.au/swnts/Indigenous-Land-Use-Agreements/ILUA-Registration/Pages/default.aspx>, accessed 25 February 2019.



TERMINOLOGY AND CONCEPTS

Meeting agendas can be de-railed when the importance of terminology is not understood or ignored, as there can be very different conceptual positions at the table and the assumptions behind these might not always be obvious.

CROWN RADICAL TITLE

Many first nations and others dispute the appropriateness of the term 'unallocated Crown land' because of the implication that the land is the State's to allocate. Instead, the term 'Crown radical title' can be used. In the common law the pre-existing rights of Aboriginal people to land under their continuing traditional laws and customs are recognized as 'native title', unless they are specifically extinguished by legislation or by land grants that are considered inconsistent with those rights. In this sense, native title is a 'burden on the Crown's radical title' — meaning that any claim that the Crown has to an area of land is subject to the pre-existing native title rights of the traditional owners. Thus, the term 'vacant Crown land' is clearly obsolete in an era where the existing Indigenous rights and interests are recognised. The term 'unallocated Crown land' is less obsolete, as unallocated Crown land is 'unallocated' in the sense that it has not been granted by the State to private owners or lessees, or claimed by the State for public uses. It is 'Crown land' in the sense that the State holds the 'radical title', that is the legal power under Australian law to allocate rights to others or to vest rights in the State itself.

CULTURE AND TRADITION

Culture is the shared meanings, norms, practices, etc, that determine what is considered normal and appropriate for a cultural group. All people have culture. For example, this can be seen in different cultural understandings about nature – whether nature is an ancestral homeland, an economic resource, wilderness, ecological systems, the source of all life, or some combination of these and more. All societies also have traditions, which are made and transformed in the present, with their defining feature being an expressed continuity with the past.

The term 'intercultural', rejects notions of cultures as exclusively bounded, self-defining and self-reproducing. Instead, all cultures are interdependent in their formation and identity, with complex histories of interaction and negotiation. Through shared experiences, cultures are exchanged, influencing and transforming each other, whether as a result of consent, force or both. People from different cultures negotiate issues of difference and similarity with each other every day.

The native title system works with a definition of 'tradition' that is narrower than how tradition is understood in society and by university disciplines. This narrower definition draws on concepts about hierarchical civilizations, in which Indigenous people inevitably lose their traditions and culture as part of joining modern society. Indigenous people looking after Country with helicopters and GIS



technology confound such simplistic and discriminatory understandings of tradition.

COUNTRY AND NATURE

Country is a word Aboriginal people use to generally describe their homelands, although it has a much broader meaning than just territory. Country connects people with places, through multi-layered multi-species and sentient kinship relationships, that are also known through and expressed as ethical and cultural domains, including knowledge systems, laws and reciprocal relations of care. People live within and with Country.

Nature and the environment are terms whose meanings arise out of Western knowledge practices that have increasingly come to separate nature and society. In this way, nature has come to be understood as plants and animals, landscapes, and so on, that are separate to humans. From this perspective, land management for bushfire risk mitigation is often understood as human management of an external nature, which is not part of ethical or cultural considerations. This is contrasted with cultural burning, which is undertaken within relationships of responsibility and care.

In intercultural Australia, the meaning of Country, nature and environment are influencing each other. In recent decades, the Federal government and other non-Indigenous parties have adopted the term 'Country' to describe their environmental and natural resource management programs.

Photo: Grass trees and an agricultural paddock.





WA MEETINGS

At each location we met with diverse peoples with the purpose of sharing the ACTPCS cultural burning program, and learning about local, state and national priorities and issues. This occurred in multiple ways. We sat around computers in ranger sheds, met in the offices of native title holders and government agencies, had a group discussion around a picnic table, gave a seminar at a fire station, and more.

NORSEMAN

At the start of the trip we spent an afternoon and most of the following day with Ngadju, in and around the town of Norseman.

Ngadju country begins hundreds of kilometres west of Norseman and continues on for hundreds of kilometres to the east of it. Ngadju country includes the world's largest dry woodland, the Nullarbor plains, salt lakes, granite ranges, and coast line. It is recognised as both exclusive and non-exclusive native title. The woodlands are recognised as vegetation communities that start maturing when 200-500 plus years old, but in recent decades intense wildfires have converted large areas to a vast scarred landscape, with no canopy and areas of thick regrowth that you cannot walk through.

Better fire management is seen by Ngadju as central to a whole range of benefits, giving social, ecological and cultural returns to local, national and global communities. To continue cultural burning, and also confirm its place in Australian policy and practice, Ngadju have established a ranger group, and are working towards an Indigenous Protected Area. Ngadju also formed the Dundas Rural Fire Brigade (DRFB), with support from Gondwana Link, and in collaboration with DFES and the Shire. Cultural burning is a learning process for all, and the Shire, DFES and Ngadju are working through these issues together. The DRFB is currently formed by present and ex staff and directors of NCAC, with Ngadju captain and lieutenants, and majority Ngadju volunteers. It is the only rural bush fire brigade in Dundas.

During our visit, Mr James Schultz, captain of the DRFB, and the Ngadju rangers showed us a recent hazard reduction burn they undertook next to the Hospital. Mr James Schultz also showed us the pre-burn works for a cultural burn at a cultural site with Gnammas (rock holes). Mrs Valma Wickers took Jessica Weir to a women's site and shared the importance of women's country and women rangers.

Mr James Schultz, Dean Freeman, and Jessica Weir also met with the new CEO of Dundas Shire Peter Fitchat. They discussed the importance of the new CEO being formally welcomed onto Ngadju country, as well as the activities of the NCAC rangers and the DRFB. This included clarifying insurance and risk mitigation issues, around which there had been some confusion in the past.



Photos: Above, an unburnt section of the Great Western Woodlands; and, below, a section of the Great Western Woodlands three years after catastrophic wildfires in 2015. The mature trees died from the intense heat.





Photo: Above, the Ngadju Rangers with Dean Freeman at the Norseman Hospital, on the site of a cultural burn; and, below, James Schultz and Dean Freeman at a Gnamma, which are made by burning fire on the rock to crack it, and then chipping it further to create the waterhole.





Photos: Above, James Schultz showing Dean Freeman how to clean out a Ngadju water tree reservoir; and, below, Mrs Valma Wickers, Ngadju Country.





ESPERANCE

The drive south from Norseman to Esperance led us from Ngadju country into Nyungar country, with many of the rangers we met here identifying as both Ngadju and Nyungar. Again, large fire scars dominated the landscape, with the same 'upside down' burnt forest structure – no canopy overhead, and thick regrowth on the ground.

We met with the Tjaltjraak rangers and others at the Tjaltjraak offices located in the centre of Esperance. Tjaltjraak is the prescribed corporate body for the native title holders, and the twelve rangers are supported through an initial 6-8 month state government grant. From the start the ranger group has been established with equal participation of men and women. The Tjaltjraak Board also has equal representation of men and women from each of the family groups.

The Tjaltjraak rangers are yet to conduct cultural burns, however, as one person said, they have the "ambition, drive and expectation" to do so. There were a lot of questions about the practicalities of conducting the burns, including planning and training. Cultural burning was also spoken about as an important way for the community to come together, as the community mainly meets up for funerals.



Photo: The scar from a high intensity fire, between Norseman and Esperance, an example of an 'upside down' canopy.



Photo: Above, Tjaltjraak Native Title Aboriginal Corporation office in Esperance (Credit: Tahnee Adamson); and, below, Dean Freeman presenting to the Tjaltjraak rangers, Esperance.





Also in Esperance, we met with staff from DBCA who were very keen to learn more about policy and practice insights about cultural burning for their agency, given the ACT experience. They shared with us their 'Fire Management Guidelines: Aboriginal Interests in Fire Management'.⁹ Afterwards, Esperance District Manager Robert Blok thanked us for the visit, writing:

We were very impressed with the advances you have made and were left encouraged knowing that integrating the needs and aspirations of all stakeholders can truly be achieved in bushfire mitigation.

NOWANUP

After our Tuesday morning meetings in Esperance, we headed east to Nowanup to meet with Noongar elder Eugene Eades, who leads a healing camp for country and people, and the Nowanup Ranger team. The welcoming party at Nowanup immediately put us at ease, as they invited us to sit by their campfire, share their food, and learn about their ethic of care through word, action and song. Nowanup has been transformed with this care. The restoration work includes a '10 acre dot painting', with a circle of medicinal plants, and the Nowanup Rangers have planted some large animal shaped totems on various properties. In this remarkable place the positivity of simultaneously nurturing country and people of country was evident everywhere.

On Wednesday, several people were invited to Nowanup for our visit, and talk about cultural burning, as well as engaging around fire more broadly. The visit by the local Brigade captain and nearby land owner led to a very useful conversation about connecting Nowanup rangers with Shire fire training courses, and also with the local brigade. The logistical advantages of this was immediately evident to all. It was also acknowledged as central that these were healing opportunities for individuals, communities and countries that have been frayed and undone by the violence of colonisation. It was inspiring to be part of it. As Dean said:

'Seeing these men just gives me incentive. They are leaders. They get respect from their family for the commitment they have made.'

An early morning visit to Mallee Fowl nests had led to the identification of some possible sites for cultural burning, and so later that morning the group returned to one of those sites, now with DFES visitors from Albany and with Nowanup Noongar Ranger Errol Eades, who also works with Noongar men in prison.

Since our visit, Nowanup has become the Nowanup Learning Centre, a 'bush university' in partnership with Curtin University and Gondwana Link. As part of this, Eugene Eades has become an Adjunct Associate Professor at Curtin.

⁹ These guidelines are not online yet, but are available on request from DBCA.



Photo: Above, sharing a meal with the crew at Nowanup; and, below, Nowanup in the morning.





Photos: Above, meeting with DFES at the Nowanup Meeting Place, with a film crew making a documentary about what has been achieved here; and, below, Dean Freeman and Eugene Eades discussing a possible site for a cultural burn.





Photo: The Nowanup crew, plus Dean Freeman, Jessica Weir and Keith Bradby (Gondwana Link).

ALBANY

At very short notice, a small afternoon meeting with bush flavoured afternoon tea, sponsored by Kinjarling Indigenous Corporation, was organised in Albany. It was attended by Noongar elder Aunty Carol Pettersen, and others from the community, including the City of Albany, as well as the DFES and Gondwana Link staff who had also been at Nowanup.

When asked by Aunty Carol for a response to the ACT cultural burning program, the City staff stated their support for cultural burning, and the importance of Noongar people having opportunities to undertake fire training courses. DFES officer Darren Prior said that he could just see “a world of possibilities” when it came to cultural burning.

PhD student Alison Lullfitz also shared with us her research based on collaborative work between Noongar Elders and conservation scientists, where many synergies have been identified between Noongar practice/protocols and scientifically-acquired floristic biodiversity conservation needs.



Photo: With Aunty Carol Pettersen, on our very brief visit to Albany.

BUNBURY

We left Albany early on the Thursday morning to drive to the Bunbury Fire Station for our presentation that afternoon. This fire station is the first in Western Australia to fly the Aboriginal flag. This station has also been the first to undergo DFES cultural governance training, as recently established by the Aboriginal Advancement Unit in Perth. Such was the intensity of this training, that afterwards the station was smoked to help with the healing.

On this afternoon we met out the back of the station next to their fire truck, which displays a positive painting about fire in the landscape by a local Noongar, and heard about how the culture of the station was transitioning and prioritising strong relationships with the local community.

Our presentation and discussion followed in the seminar room. As had happened at each stop, the people we met with focused on how the practice of cultural burning related to the broader socio-cultural context. Essentially, they asked, “yes, this is how it is done in the ACT, but how was it possible in the first place?” Again, Dean presented on how people in the ACT had found the pathways through to support cultural burns – the critical role of motivated individuals and good relationships, with the first nations being supported to lead the way.

During the meeting, Mr Bennell, an Elder from Esperance, shared his concerns about the lack of clarity and cohesion about bushfire risk mitigation responsibilities in and around Esperance. He wept for the four people killed when a 2015 fire ran across farmland for 120 kilometres in six hours.



Photos: Above, Bunbury Fire Station was the first in WA to fly the Aboriginal Flag; and, below, learning about the cultural governance training course that was undertaken at Bunbury Fire Station





Photo: With the Bunbury fire truck displaying the mural created by a Noongar artist.

PERTH

On Friday we had our last meetings in Perth.

In the morning we met with DFES at their Headquarters, to discuss the changing policy and practice space across southern Western Australia, as organised by Tim McNaught, Director of the Office of Bushfire Risk Management. Trish Wall, Manager of the Aboriginal Advancement Unit, gave the Welcome to Country, and spoke about her work with remote Aboriginal communities to "give back with self-determination, education and training." DFES talked about how they see cultural burning as one of a suite of tools needed to achieve better social, environmental and economic outcomes from fuel management.

We shared our experiences from the trip across southern WA, and also spoke about cultural burning at ACTPCS. The meeting reflected on how geography affects the 'visibility' of Aboriginal people to governments and mainstream society more broadly: remote communities are "discrete and highly visible", compared to the tens of thousands of Aboriginal people living in Metropolitan Perth. Another key issue discussed was how cultural burns can inform current prescribed burning tensions, including the pressure to burn large areas of land because of the advantages with respect to allocating resources efficiently for strategic landscape fuel management. Also, the synergies with burning for ecological values were discussed.

In the afternoon, we met with Ngadju man Les Schultz and Noongar leader Oral MacGuire. We discussed traditional owner agency, looking after country,



and engaging with governments. Les talked about his experiences with cultural burning and prescribed burning:

We can do the boots on the ground, we can do the community partnerships, but once you get up into the policy level, that's where the dramas come in.

Oral shared with us his experiences with restoring ecological and cultural values to agricultural land purchased for that purpose, including conducting cultural burns.



RESOURCES AND LINKS

Ngadju Kala: Ngadju fire knowledge and contemporary fire management in the Great Western Woodlands

<https://publications.csiro.au/rpr/pub?pid=csiro:EP135694>

WA DBCA Guidelines

'Fire Management Guidelines: Aboriginal Interests in Fire Management', Department of Biodiversity, Conservation and Attractions, Perth. Available on request from DBCA.

ACT PCS Bushfire Management

https://www.environment.act.gov.au/ACT-parks-conservation/bushfire_management

National policy positions on cultural burning:

COAG National Bushfire Management Strategy

<https://www.environment.nsw.gov.au/research-and-publications/publications-search/national-bushfire-management-policy-statement-for-forests-and-rangelands>

AFAC Council position on Prescribed Burning

<https://knowledge.aidr.org.au/media/4869/national-position-on-prescribed-burning.pdf>

Bushfire and Natural Hazards CRC research

Bushfire and Natural Hazards CRC research project website on 'Hazards, Culture and Indigenous Communities'

<http://naturalhazardscrc.com.au/research/hazard-resilience/3397>

This includes a research report on the ACT government's Cultural Burning forum in 2018:

<https://www.bnhcrc.com.au/publications/biblio/bnh-4738>

Gondwana Link

<http://www.gondwanalink.org/>



Administrative Unit: City Services
Burn Name: Ghubar Dhaura
BOP Number: AFB001
Burn Location: Franklin
SBMP Zone: SFAZ
Target Fuel Hazard: <35

The burn was proposed by the local Ngunnawal Aboriginal community as an ongoing commitment to Caring for Country. It is proposed that the site be used to host a burn for 100 conference delegates and it is expected that Ministers, senior executives and media will attend.

Prepared By:

Name: Dean Freeman
Position: Aboriginal Fire Project Officer
Date: 23/11/2017

Reviewed/Approved By:

Name: Brian Levine
Position: Senior Fire Officer
Date: 01/05/18

Checklist	Action	Name/Date	
Draft Burn Plan	Completed	Freeman/30/04/18	<input checked="" type="checkbox"/>
	Burn map prepared	Leavesley/30/04/18	<input checked="" type="checkbox"/>
	Forwarded to CPR for comment	Jenkins/01/05/18	<input checked="" type="checkbox"/>
	Comments received from CPR	Jenkins/01/05/18	<input checked="" type="checkbox"/>
	Forwarded to District for comment	Bathgate/26/04/18	<input checked="" type="checkbox"/>
	Comments received from District	Bathgate/30/04/18	<input checked="" type="checkbox"/>
	Traffic Management Plan approved	Not Required	<input checked="" type="checkbox"/>
	Letterbox Flyer Complete	Levine/30/04/18	<input checked="" type="checkbox"/>
Final Burn Plan	Internal Fire Management review	Levine/01/05/18	<input checked="" type="checkbox"/>

Burn Out Declaration (Burn is blacked out and no smokes present for 24 hours)	
Signature:	Date and Time:

Light Up Checklist (To be completed prior to ignition)		
1) Has the Prescribed Burn Decision Support Tool (PB DST), Appendix C been completed? If <u>NO</u> , complete PB DST prior to proceeding with checklist. If <u>YES</u> go to item 2.	YES	NO
2) Is the outcome of the PB DST consistent with the burn objectives and has the risk been determined to be acceptable? If <u>YES</u> , proceed with the checklist below, if <u>NO</u> , STOP. Implementation is not allowed.		

QUESTIONS	YES	NO	NR				
Email and Phone notifications completed?							
Media Release completed?							
Letterbox Completed?							
Have ALL permits and clearances been obtained? Permit Number: Traffic Plan Number:							
Smokes signs in place? (In accordance with traffic management plan)							
Have ALL Pre-Burn works been completed?							
Are all prescribed resources on site?							
Is the FDI within prescription during the planned burn period?							
Is the FDI measured onsite within prescription? If NO , is forecasted FDI within prescription?							
Are all smoke management specifications met?							
Have ALL personnel been briefed on objectives, their assignments, safety hazards, escape routes, and safety zones?							
No members of public in burn area?							
COMCEN advised of the Burn?							
If all the questions were answered <u>YES</u> (except for NR) proceed with a test fire. If any questions answered <u>NO</u>, then DO NOT PROCEED WITH THE TEST FIRE. Implementation is not allowed.							
Test Fire Results:							
Date	Time	Location	Temp	RH	Wind (Speed/Direction)	Flame Height	ROS
After evaluating the test fire, can the burn be carried out according to the Prescribed Fire Burn Plan and will it meet the planned objectives?						YES	NO

Incident Controller/ Div Com

Date

SITUATION

Ghubar Dhaura Cultural Burn			
Location	UBD Map 29, P10, 11 . Handy Reference: n11; Walling Street Franklin		
Reason for Burn	The primary reason for the burn is to undertake a cultural burn on 12 May 2018 in conjunction with the Aboriginal Fire Forum. It is expected that 100 delegates will be present, Ministers, senior executives and media. Secondary reasons are to restore native grasslands and provide protection to a significant cultural site.		
Size	6ha	Elevation	610m
Slope	0-10°	Aspect	Various
Fuels (on-site, adjacent) & fire history)	The target fuels are Phalaris and other grasses. There are some eucalypt trees on the site, mainly Apple Box. Adjacent fuels include grasslands and shrub beds.		
Control lines (location, type & length)	This burn is contained by concrete footpaths with slashed edges. The park is surrounded by bitumen roads.		
Assets	Paths, fences, bollards, cast iron gates, seating, newly planted seedlings, ochre pit		
Significant sites	Gubar Dhaura Ochre Quarry, Original mail run route for Ginninderra		
Smoke sensitive	The burn is surrounded by the suburb of Franklin. The site is on a spur slightly higher than the surrounding houses.		

Vegetation/ Fuels Description:

Structure	Grassland
Grass Height (m)	10cm-70cm in places
Grass Cover (%)	80%
Grassland Fuel Hazard Score	Very High

MISSION

Objectives:

- Land Management Objectives:
 - To complete a low-intensity burn of grass fuels to promote native species.
 - Prevent fire spread into the suburb of Franklin.
 - Maintain integrity of cultural and historical assets.
 - Maintain integrity of habitat and hollow bearing trees.
- Prescribed Fire Objectives:
 - Implement LACES to provide for firefighter and public safety.
 - Implement a delegate protection plan using dedicated resources.
 - Maintain close control of the fire to maintain the safety of conference delegates and the public.
 - Minimize accidents and injuries by identifying hazards and managing risks to public and firefighters.

Expected Duration:

- 1 day

EXECUTION

Weather and Fuel Moisture Prescriptions

Temperature (°C)	15	to	30	KBDI (mm)		<	100
Relative Humidity (%)	30	to	75	Drought Factor		to	
Wind Speed (km/hr)	3	to	15	Curing (%)		>	70
Wind Direction	Any			Target FMC (%)		to	

Forest FDI		to		FDI following Burn	
GFDI*	1	to	8	GFDI following burn	Less than 8

*No burn if forecast conditions for the expected duration of the burn exceed the parameters.

Predicted Fire Behaviour: Using Leaflet 80; backing fire outputs derived with -20° slope

	Minimum prescription	FDI: 3		FDI:15	Maximum prescription
Drought Factor	7	0.1 0.3	Backing Flame height (m) Forward Flame height (m)	0.5 1.8	9
Fuel Load	15	3	Backing Rate of spread (m/hr)	16	15
Slope	0°/-20°	12	Forward Rate of spread (m/hr)	62	0°/-20°
Temperature	20	7.3	Max Scorch height (m)	17.2	29
RH	50	16 61	Backing Intensity (kW/m) Forward Intensity kW/m)	111 417	30
Wind Speed	3	0	Spotting Distance (km)	0.6	15

Scheduling:

- Implementation Schedule: This burn can be undertaken when prescription is met

Constraints:

- No limited operating periods exist.
- No foam.

Groupings:

The burn can be run as part of an Incident Management Team (IMT). The burn itself requires a DIVCOM, one sector to implement the burn and another sector to provide dedicated protection for conference delegates and guests. IMT functions are required for management of the Minister, senior executives, traffic management and delegate catering.

Minimum Resources Required (per sector):

Lighting Personnel	2
Light Units	1
Medium Tankers	
Tankers	1
Aircraft:	
Handtool personnel	2

Ignition Plan:

- Type:
 - Ground
- Test Fire:
 - A test burn should be undertaken in a representative location of the burn area. All resources must be on scene prior to any test fire. The following characteristics should be considered when determining the location of the test fire:
 - The highest part of the burn.
 - Lee side of the burn.

- The Incident Controller (and/or Div Com) should determine if the observed fire behaviour during the test fire will achieve the burn objectives in a safe and efficient manner.
- **Ignition Methods:**
 - If the test fire is successful, lighting will continue.
 - Incident Controller will determine which techniques will best achieve the desired outcome.
 - **Protect cultural assets by limiting direct impact from fire.**
 - **Protect mature trees by limiting direct impact from fire.**

Operational Considerations (Strategies to address Description of Unique Features):

Assets	Paths, wooden fences, bollards, cast iron gates, seating, newly planted seedlings, ochre pit. Clear around base of assets to prevent fire from impacting them.
Significant sites	Gubur Dhaura
Smoke sensitive	The suburb of Franklin surrounds the burn which is on a shallow spur. Implement burn when fuels are sufficient cured and/or when atmospheric conditions will promote sufficient lift and dispersal of smoke.
Values Officer	Values Officer best suited in the field for this burn.

Water points:

- Hydrants, Tankers

Contingency Plan:

Trigger Points	
1) A sudden and/or unexpected change in temperature, relative humidity, wind strength, or wind direction which can compromise the ability to maintain control of the burn, or exceeds prescription parameters.	
Action Needed	<ul style="list-style-type: none"> a) Notify personnel of condition changes and b) Secure safety of conference delegates and c) Cease ignition and secure fires edge or d) Continue only if favourable conditions return.
2) Spot fires or slop overs exceed the capabilities of the suppression forces.	
Actions Needed	<ul style="list-style-type: none"> a) Secure safety of conference delegates. b) Identify if you have sufficient resources to continue burn and maintain control of spot over's, <u>if not: Cease firing and/or call for resources.</u> c) Continue only if favourable conditions return.
3) Observed fire behaviour (spot fires, fire intensity, fuel consumption) and/or smoke management is not meeting the objectives especially in relation to conference delegates.	
Actions Needed	<ul style="list-style-type: none"> a) Cease burn and re-position delegates to a safe location. Only continue if safety can be assured. b) Cease burn, only continue if conditions change.

- **Additional Actions:**
 - Fall back Control lines:
 - Pre-determined contingency lines
 - Keep fire north of Manning Clarke Cres, south of Barbara Jefferis and Henry Kendall St, west of Dianne Barwick and Alice Crist St, east of ; Eve Langley and Elizabeth Jolley St
 - **Adjacent future burn areas:** No adjacent burns

- If contingency plan is successful with bringing the prescribed fire back into prescription, the prescribed fire may continue to proceed at the discretion of the IC.
- **Notifications:**
 - If fire threatens to or exceeds the prescription parameters and/or line holding capabilities the Incident Controller will notify the RFS Duty Officer.
 - The Incident Controller will contact COMCEN and notify them of the change in status. COMCEN can then order the necessary resources.

Post Burn Patrol:

- The Incident Controller and/or the Divisional Commander will complete the prescribed burning decision support tool (PB DST) which provides guidance to determine the appropriate actions following ignition; this includes advice for patrol and mop-up standards.
- Continuing patrol of the burn area will be undertaken until no smokes are visible for at least 24 hours and/or the Incident Controller has deemed that no interior smokes present a holding concern.
- The Incident Controller will determine the appropriate number and type of patrol units required based on the PB DST.

Administration

Staging/ Assembly Areas:

- Dianne Barwick St Franklin

Incident Control Point:

- Staging Area, then mobile.

Catering:

- Catered

Vehicle:

- Light and medium units should remain on existing tracks and formed crossings whenever possible.
- Vehicles should be washed down before and after burn to reduce the spread of weeds.

Notifications:

Notification Checklist				
Required	Who	Contact Number	Date	Time
Email Notifications				
<input checked="" type="checkbox"/>	ACT Government External			
<input checked="" type="checkbox"/>	ACT Government Stakeholders			
<input checked="" type="checkbox"/>	ACT RFS			
<input checked="" type="checkbox"/>	EPD Media			
<input checked="" type="checkbox"/>	Park Care/ Landcare			
<input checked="" type="checkbox"/>	District Managers			
<input type="checkbox"/>				
Phone Notifications:				
PCS Notifications				
<input checked="" type="checkbox"/>	PCS Duty Coordinator	0403 607 606		
<input checked="" type="checkbox"/>	EPD Media (morning of burn)	0401 766 218		

ESA Notifications				
<input checked="" type="checkbox"/>	RFS Duty Coordinator	02 9962 4699		
<input checked="" type="checkbox"/>	COMCEN (notify F&R supt, CFU)	6200 4111		
NSW RFS				
<input type="checkbox"/>	Lake George Fire Control	6297 1840		
<input type="checkbox"/>	Cooma Fire Control	6455 0455		
<input type="checkbox"/>	Yass Fire Control	6226 3100		
Other				
<input checked="" type="checkbox"/>	Police (Ask for Operations)	131 444		
<input checked="" type="checkbox"/>	Environmental Protection	77110		
<input type="checkbox"/>	Air Traffic Control	6268 5850		
<input type="checkbox"/>	Action (Check if by busy road)	77808		
<input type="checkbox"/>	Roads & Stormwater (check if TMP)	75478		
Project Specific Contacts (Lessees, smoke sensitive sites, etc)				
<input type="checkbox"/>				
<input type="checkbox"/>				
<input type="checkbox"/>				

Communications

Channels to be determined by Incident Controller and/or Div Com prior to ignition and will be noted in the Incident Action Plan. At a minimum, a command channel will be identified and 1 tactical channel. There will be the potential of a separate tactical for each sector if lit simultaneously.

Example of communication table that will be completed prior to commencement.

ZONE	CHANNEL	FUNCTION	ASSIGNMENT
B		COMMAND	ALL SECTORS
B		AIR OPS	HELICOPTER
B		TACTICAL	ALPHA
B		TACTICAL	BRAVO
B		TACTICAL	CHARLIE
B		TACTICAL	DELTA

Community Engagement:

- **Traffic Management:** Traffic plan will be in place for this burn
- **Warning Signs:** Will be placed on major roads.
- **Public on fire ground:**
 - Is a public liaison required for this burn **Yes**
 - Trails should be checked prior to ignition.
- **Media Opportunities:**

There is an opportunity for media to be present at this Cultural burn

Safety

General Safety Procedures:

- A full SMEACS briefing will be provided before burn is commenced.
- The LACES safety checklist system (Lookouts, Awareness, Communications, Escape routes, and Safety refuges) is to be applied and continually review.

- All units are required to use red/blue flashers or beacon lights whenever they are on the fireground.

Known Hazards and Mitigations:

KNOWN HAZARDS & MITIGATIONS	<ul style="list-style-type: none"> • Power lines; N/A • Standing dead trees: N/A • Clear base of trees to prevent fire impact • Clear base of all assets
--	--

Hazardous Trees:

- No hazardous trees have been identified however:
 - Look up, Look Down, Look Around; be aware of hanging dead limbs, and/or standing

Refuge Areas and Escape Routes:

- Personnel need to be familiar with gates and roads prior to ignition. Div Com and/or IC to identify specific refuge areas prior to commencement.

Emergency Evacuation Plans:

- **Ambulance:**
 - Initial point will be staging area UBD Map 29, Handy Reference: p10; Dianne Barwick street Franklin
 - IC will appoint a person to meet the ambulance and guide them to the appropriate location, if necessary.
- **Helicopter Landing Point:** To be identified by Incident Controller.

First Aid:

- Kits will be identified at briefing.
- All injuries, regardless of severity will be reported to IC.
- It is the responsibility of the crew leaders to ensure that paperwork is completed by their crew members when an injury occurs.
- IC needs to obtain injury reports from crew leaders and submit to Stromlo.

Pre Burn Works: COMPLETED

- Fire Crews:
 1. Remove fuel around wooden features and the base of habitat and mature trees along containment lines.

Post Burn Evaluation

- 1) Were the objectives achieved, if not why?
Yes
- 2) Was the pre-burn work completed prior to implementation? Please describe any additional pre-burn work that could have aided the burn: **Pre-burn works were completed prior to the burn taking place**
- 3) Where there sufficient resources on scene to implement the burn? If not, explain why:
Yes
- 4) Which firing techniques worked best on the burn?
- 5) Describe the fire behaviour (head/ backing fire, ros, flame height, fuel consumption):
Fire continues at a slow rate of spread with flame height not exceeding a metre
- 6) Estimate the percentage of area burnt?
80%
- 7) Where there any escapes? If so, what do you believe contributed to the escapes?
NO
- 8) Where there any accidents or near misses, please describe? Has the paperwork been completed?
No
- 9) Were all the known hazards identified and properly mitigated before implementation? Were any new hazards identified? **Yes, all hazards were identified and mitigated properly on this burn**
- 10) Were the ecological considerations met and the assets protected? If not, explain why.
Yes
- 11) What changes would you suggest to improve this burn next time or future burns? Fuel to have less moisture when next part of burn is implimented

Report prepared by:

Date

EPA Post Burn Assessment

SUBJECT: Post burn report for Environmental Authorisation No. 412 (ACT Parks and Conservation Service)

A hazard reduction burn was undertaken on 2/05/2018 . Post burn reporting details are as follows:

Location: Gubar Dhaura, Franklin

Name and address of the person or company conducting the burn:

Name: Dean Freeman
Agency: ACT Parks and Conservation
Work address: 500 Cotter Rd, Weston Creek, ACT 2611

Type of burn (as specified under Schedule 1 of the *Environment Protection Act 1997*.)
 To reduce a fire hazard

Vegetation / fuel type: Grassland/Woodland

Fuel condition (piles or dispersed):

Area (ha): ha

Purpose: The objective(s) of this burn was to:

- To reduce fire hazard
-
-

Actual meteorological conditions during burn:

Smoke Management: The burn was undertaken under prevailing winds. The stability class for the day was () Upper winds (1500m) were forecast at km/h from the

Prepared by:

Position:

Date:

Prescribed Burn Plan Appendices

- A. Reviewer Checklist
- B. Prescribed burn map(s)
- C. Prescribed Burn Decision Support Tool (PB DST)





Reviewer Checklist

Elements	S/U	Comments
1) Signature Page	S	
2) Checklist Complete	S	
3) Vegetation/ Fuels Description	S	
4) Description of Unique Features	S	
5) Objectives	S	
6) Weather and Fuel Moisture Prescriptions	S	
7) Constraints	S	
8) Resources Required	S	
9) Ignition Plan	S	
10) Operational Considerations	S	
11) Contingency Pan	S	
12) Administration Complete	S	
13) Project specific notifications added to list	S	
14) Safety	S	
15) Pre-burn works plan completed	S	
Other:		

S= Satisfactory

U= Unsatisfactory

Recommended for Approval: ___X___

Not Recommended for Approval: _____

Reviewer

01/05/18
Date

Basic Prescribed Fire Plan

A) Burn Details

What is being burnt (fuel)?: _____ What is the estimated size of the burn? _____ m²/ha

What type of burn do you intend to carry out? Pile Running Fire (Scrub) Windrow Other (specify)

Why do you need to burn?
 Fuel reduction Regeneration Rubbish Removal
 Disease or Pest Control Biodiversity Management Clearing
 Other (specify) _____

How will the burn be contained? _____

How will you control the burn (resources/equipment)?

How will you put the fire out?

What wind direction(s) are suitable for the burn? (circle 1 or more) N, NE, E, SE, S, SW, W, NW, (indicate with arrows on the map or sketch opposite).

B) Surrounding area assessment

What assets are nearby? (Including native vegetation)

Nearby properties (include contact details)

How will each of these (assets) be protected?

c) Issuing Officer - Burn Details Assessment

What is the requirement to burn?	Low	Moderate	High	Extreme	If Extreme state reason below _____ _____
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
What is the level of containment of the burn?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
What is the level of control over the burn?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
What is the applicants' level of knowledge of their requirements in relation to the burn? (Refer to Bushfire Act and Regulations)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

D) Issuing Officer - Burn Impact Assessment

Rate the importance of assets near the burn?	Low	Moderate	High	Extreme
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate the impact from smoke on neighbouring properties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate the impact on adjacent properties, assets or infrastructure if the burn escapes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Recommend PFP? Yes No To be referred for further assessment

Authorised Officer: Name: _____ Signature: _____

If No specify reason _____

Attach map or include sketch below