



Native Vegetation Council

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██████████
8 May 2020

Mr M J Keelty AO
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Dear Mr Keelty

Re: Submission to the State Bushfire Review from the SA Native Vegetation Council

On behalf of the SA Native Vegetation Council (the Council) I thank you for meeting with me on Monday 4 May 2020, and for being open to receiving the attached correspondence from the Council.

Please accept my apologies for the time it has taken to provide you with the following response. It has been appropriate to include all members of the Council to provide due consideration and approval.

The Council recognise the impact that the horrendous fire season has had on the South Australian community and the Australian community at large – and continues to have. Like many South Australians, we experienced direct and personal connections to the impact of these fires, and are pleased your review is underway.

The Council understand that ‘we’, as a population, must get better at managing fire – and quickly. Mother Nature is sending us very strong climatic messages, and we know that our already harsh summers are only going to get hotter, drier and longer. Indeed, native vegetation plays an important role in preventing this problem from getting worse, by contributing to addressing what will increasingly be the cause of bushfires – climate change.

The community also need to get better at assessing risk that lead to loss of life and property and plan accordingly. For example building property in the middle of bushland vs a more open area, or the ever increasing spread of suburbia closer to reserves and conservation parks are high risk.

Whilst the protection of human life must always be our first priority when it comes to fire, we need to continue to consider the impacts of fire on our livelihoods and ecologies in a sensitive and evidence-based way.

The Council recognise the incredible work that our Emergency Services undertake under the most trying of circumstances and their courage and skill was evident in the summer of 2019/20. We also recognise with sadness the three lives that were lost in the SA Bushfires – and extend our condolences to their families and friends.

We also grieve for the ecological damage and loss of species (some of which may be lost forever) which also occurred as a result of these events. Fires leave scars not only on the landscape but on people and communities forever. As a Council, we will continue to undertake our role in the State, to ensure that we are as prepared as we can be for the fires of the future, and wherever, possible assisting in their prevention.

The Council thank you for the opportunity to participate in your review, and our submission attached to this letter outlines:

- The importance of protecting native vegetation
- Who the Native Vegetation Council are / Our role
- Addressing misperceptions of native vegetation and bushfire
- How fuel loads are managed in South Australia
- What the Native Vegetation Council does and does not do in regards to fire hazard reduction
- Roadside vegetation management processes
- Key areas for further attention
- Ideas for achieving population scale change around fire

We welcome the opportunity to provide further clarity around anything raised in this submission which may further assist you in providing your recommendations to the South Australian Government.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Emily Jenke', with a stylized flourish at the end.

Emily Jenke
Presiding Member
SA Native Vegetation Council

The importance of protecting native vegetation

By evidence of the existence of our legislation, native vegetation has been deemed to be important to protect for a very long time – in South Australia and across Australia.

As it declines in volume and our population grows, protecting our species habitat becomes more and more urgent. Ecologically, socially, culturally and economically – native vegetation holds the key to us navigating a complex climatic future which is upon us.

“The living Australian vegetation is the end result of one of the great natural experiments. Forty million years ago, much of Australia was connected to Antarctica (as part of the supercontinent Gondwana) and it was largely covered in dense and diverse rainforest. However, Australia probably completed its separation from Gondwana by 30 million years ago and since then its biota evolved in isolation as the climate shifted from warm and ever-wet to the current, largely arid-dominated, climate.

During this period the Australian vegetation evolved in response to changing climate to produce one of the most unique mosaics of vegetation types on the planet.

At a fundamental level, Australian vegetation holds the key to many critical questions about the way vegetation responds to large scale, long term environmental change.

The current Australian vegetation is also the result of 50,000 years of uninterrupted human interaction and again this is globally unique, but far from fully understood. Since European occupation, the vegetation has been cleared and altered in a way that is unprecedented throughout millions of years of prior history and that process continues at an alarming rate.

We know far less about the vegetation, including its potential for human good, than most people realise – we have only unlocked a small fraction of the critical information that this unique vegetation holds. It is vital that we protect what remains of the vegetation, not just for current Australians, but so that future generations can appreciate and, in the most positive way, exploit what our vegetation has to offer.”

Professor Robert Hill, Director Environmental Institute, The University of Adelaide and Native Vegetation Council Member, 2020.

Who are the Native Vegetation Council

The Native Vegetation Council (NVC) is a 7-member statutory body established under the *Native Vegetation Act 1991* (the NV Act).

The Native Vegetation Branch (NVB) of the Department of Environment and Water (DEW) provides secretariat support to the NVC.

The NV Act covers the whole of South Australia with the exception of the some parts of metropolitan Adelaide area. Our role is focussed on the preservation, enhancement and management of native vegetation across landscapes, including inland wetlands, rivers and marine environments and includes determining applications for clearance of native vegetation.

Clearance of vegetation can be approved under the Act subject to a range of considerations. Applications for clearance approval are rarely refused, largely a result of the significant amount of work that the NVB, supporting the NVC undertakes with proponents as they plan and design their development.

As a regulatory body, we are often required to make difficult decisions that must address competing demands and interests. This can create tension with the applicants and the community, with both people who want more clearance and those who want less. As you can appreciate, people are rarely happy engaging with the regulatory body like ours.

In addition to this, also as you have discovered, our role is not well understood throughout the community. This is not an area we have been in a position to address in recent years, due to increasing and ongoing budgetary constraints.

As a result of the above, we focus a lot of our time, energy and (minimal) resources to continuously improve the processes for working with the many and varied individuals who engage with the Council, to make it simpler, more predictable, and streamlined.

Whilst outside of your remit, we think it is opportune to provide you with a sense of the scale and reach of our work – in an attempt to correct misinformation which exists about our role, and about our perceived negative impact on land owners and business owners. We attach this information at **Attachment C** which includes our updated clearance approval statistics, compliance reports, and core initiatives of the NVC.

It is recognised that good contemporary legislation can be highly effective – and can keep people and the environment safe and productivity achievable at the same time. The NVC is absolutely supportive of improving our legislation in a reasoned and ongoing way to achieve this fine balance – as we have been demonstrating in recent years as we amend and improve our legislative frameworks and processes.

Addressing misconceptions of native vegetation and bushfire

Community perceptions consider native vegetation as the key 'cause' of bushfire.

It is likely that the NVC will be blamed in part, for the bushfires due to the protection of native vegetation which was perceived to have fuelled the fires. Adding to this, we understand that many people, will be taking this opportunity to make a statement about a system which they think is unfair and impinging on their 'rights' to do what they wish to the landscape.

The NVC unashamedly stand by our role and responsibility for the only State-wide environmental protection legislation, *to protect and conserve South Australia's native vegetation*, and as a result of that, the protection and conservation of our native animals and our human existence.

Our submission below provides evidence and facts about our role in fuel load and bushfire management – which we believe addresses many misconceptions. We also provide information to you which speaks more broadly about our role, our intent and our processes.

The NVC are pleased you are taking this opportunity to 'look under the hood', and we trust that once you understand the system in full, you will recognise that these misconceptions are not only unwarranted, but also misrepresentative.

It is the view of the NVC that the *Native Vegetation Act* and the *Native Vegetation Regulations* are not the problem and should not be discarded or drastically amended as a result of your review. The NVC believe the problem is that we are in unprecedented climatic territory, and the authorities and community are simply not ready or resourced sufficiently for this.

Our native plants and animals have been here for thousands of years and are the best equipped species to withstand our changing climate. They must be protected, so they can continue to protect and provide for us.

We would welcome your recommendations contributing to 'busting these myths' and reframing the conversation around native vegetation and fire. We agree that more needs to be done to change perceptions to ensure that native vegetation and fire protection outcomes can both be achieved.

How fuel loads are managed in South Australia

Fuel management is a shared responsibility in South Australia, involving multiple agencies and land managers: Local Councils, SA Country Fire Service, DEW, and public and private landholders.

In the aftermath of the 2009 Victorian Bushfire Inquiry, the Government of South Australia amended the NV Act and (then) *Native Vegetation Regulations 2009* giving the authority to approve or undertake fire hazard reduction activities to individual landholders and the Chief Officer of the CFS, and aligned it with the State Bushfire Management Plan and Bushfire Management Area Plan processes under the *Fire and Emergency Services Act 2005* (FES Act). Further amendments to streamline the processes were enacted in 2013, 2014 and 2017.

The *Native Vegetation Regulations 2017* (the NV Regulations) provide for fire management, hazard reduction and fuel management, by allowing;

- Landowners to clear around their dwelling, building and around their boundary, without the need to seek any approval from the NVC or other bodies;
- Fuel reduction practices, fuel breaks, fire access tracks and prescribed burning under the authority of the Chief Officer of the CFS;
- Clearance for bushfire management activities, without the need to seek any approval, if undertaken in accordance with the relevant Bushfire Management Area Plan
- Clearance in emergency situations, without approval, if undertaken by or under direction of an Officer of the CFS, MFS and SES.
- Fundamentally, the current system for clearance of native vegetation for fire hazard reduction purposes is streamlined, responsive, flexible and balanced, largely yielding authority and responsibility for clearance of native vegetation for fuel reduction to the CFS and Bushfire Management Area Plans under the FES Act.
- As such, the NVC is mostly removed from direct engagement with the fire hazard reduction process. The NVC does play a supportive role to the relevant agencies and landholders within the broader fire management context.
- A summary of the authority and requirements for fire hazard reduction of native vegetation is included in **Attachment A** for your reference.

What the Native Vegetation Council does

In terms of fire hazard reduction and fuel management, the NVC:

- Directly approves a limited number (generally less than 5 per year) of applications to undertake ecological burns on private land, usually related to DEW's burning on private land program.
- Directly approves Standard Operating Procedures for the development of Bushfire Management Plans by DEW, Forestry SA, and SA Water. These allow for bushfire prevention activities to occur on Public land without the need to obtain further approvals from NVC.
- Provides a range of information for landholders on the opportunities and processes for native vegetation clearance for fire hazard reduction <https://www.environment.sa.gov.au/topics/native-vegetation/clearing/fire-prevention> and clearing native vegetation after a fire [Native Trees in Burnt Areas FAQ](#).
- Considers and approves clearance required for bushfire prevention and control, associated with any new development. The NVC take advice from the CFS as to the requirements for each development.
- Provides annual training to CFS Officers assessing clearance for bushfire management activities.

What the Native Vegetation Council does not do

The NVC has not had a significant role in the bushfire management approvals and fire hazard reduction undertaken by landholders for many years, and:

- Does not receive and approve applications from landholders wanting to conduct fire prevention measures on their property.
- Does not receive and approve applications from local councils about hazard reduction, fire prevention measures on Council owned or managed land.
- Does not receive and approve applications from the CFS in relation to fuel reduction, fuel breaks, fire access tracks and prescribed burning.
- Does not monitor bushfire prevention activities and whether they have been completed.
- In the case of an active fire event ,does not have a role in approving clearance required for emergency access, back burning operations, establishment of containment lines or similar.

These activities are largely undertaken in accordance with the FES Act. Amendments were made to the NV Act in 2013 to ensure that if there were any inconsistencies between the NV Act and the FES Act, the latter would prevail.

Following the amendments in 2009 to provide the authority in relation to fire hazard reduction to the CFS, all messaging around bushfire became the responsibility of the CFS to ensure that there was consistency in the community messaging about fire prevention, preparedness, response and recovery – as should continue to be the case.

To support the CFS, the Native Vegetation Council (supported by the NV Branch);

- Assists in the development of communication material, such as the [Guide to Managing Native Vegetation for Bushfire Safety](#)
- Provides a representative on the State Bushfire Coordinating Committee (SBCC)

- Provides a representative on the Ecological Technical Reference Group, which supports the SBCC through the development of policy, guides and supporting material
- Provides training on an annual basis to CFS Regional Prevention Officer relating to the NV Regulations and environmentally sensitive fuel management approaches
- Participates in annual training for Local Council's Bushfire Prevention Officers in relation to the Native Vegetation Regulations
- Provides advice and assistance to landholders seeking to understand permitted clearance for bushfire protection and the associated process
- Actively engages with the CFS in relation to the development of any new policies, guidelines and legislation, such as the review of the Native Vegetation Regulations in 2017 and the recent review of the Roadside Vegetation Management Guidelines in 2019

Roadside vegetation management

The NVC is aware that the management of roadside vegetation is a particular concern for some parts of the community and has emerged as part of your review.

Roadside vegetation is often of high value. In many dryland production areas across the state, roadsides are some of the large sections of native vegetation that exist in local areas. Of course, these areas are also high risk for people and vehicle. Roadsides also assist in managing wildfire – Council members have reflected that during the Pinery fires, trees, especially roadside vegetation helped to slow down the wildfire.

Local Councils are able to manage their roadside vegetation in accordance with *Guidelines for the Management of Roadside Native Vegetation and Regrowth Vegetation (the Guidelines)*, that have been developed by the NVC or in accordance with a Management Plan developed by the local Council and approved by the NVC. Noting the Guidelines for managing roadside vegetation were updated in 2019 following considerable co-development with local Councils - the updated Guidelines significantly increased the ability for local Council's to manage their roadside vegetation without needing any approvals.

The Guidelines relate to the safe movement of vehicles on the road and do not directly address fire management. The NVC considers that fire management needs to be considered and addressed at a landscape wide and tenure blind level allowing for a range of considerations to be taken into account, such as prioritisation of roads to provide safe access and egress to fire safer settlements.

Management of roadside vegetation for fire should be part of the BMAP process, where the relevant information, expertise and process exists. Considering fire management as part of the roadside vegetation management plans risk having an ad-hoc approach with inconsistencies between neighbouring Councils. Specific clearance of roadside vegetation not included in the BMAP can be made with the approval of the CFS or delegate.

In relation to your specific interest in the Kangaroo Island Roadside Vegetation Management Plan (KI Roadside Plan), I advise that the draft KI Roadside Plan does not address fire management matters. Rather, it simply states that such clearance will occur in accordance with the KI Bushfire Management Area Plan (referred to as the Bushfire Risk Management Plan) or with the approval of the CFS. Therefore, even in the absence of their draft plan being approved, this has not in any way prevented fire management measures being implemented on the road reserves in the lead up to the 2019/20 bushfire season.

The KI Roadside Vegetation Plan has not been approved to date is as it has not adequately met the legislative requirements for the development of a plan.

Key areas for further attention

The NVC consider the following areas require further attention. These are listed in priority order to support preparations for the 2020/21 Bushfire Season.

1) CFS Officers are not fully equipped in ecological aspects of fire hazard reduction

Managing and clearing vegetation for fire prevention and control, whilst minimising impacts on biodiversity, requires a level of skills, expertise and knowledge in ecology as well as fuel management.

An annual training session is provided by the Native Vegetation Branch to the CFS Officers (who undertake fuel reduction assessments); however it is not possible to cover the diversity of vegetation and options for confident assessment in the field, particularly in complex vegetation environments.

Further resourcing to enable CFS Officers to access ecological knowledge would address this issue.

2) Landholders may not understand what they can clear or what the process is to gain approval to clear

Clearance of native vegetation can occur for a variety of reasons such as housing development, industry, recreational pursuits, infrastructure, roadside management and ecological benefits.

It appears that landholders and some authorities are not able to distinguish between clearance of native vegetation for fire hazard reduction purposes or other purposes. Further, landholders do not appear to be aware of the allowed clearances and streamlined processes for fuel reduction administered by the CFS.

Clear communication and support to landholders is required on the options for fuel management, the available exemptions and CFS approvals available for fire hazard reduction.

Appropriate resourcing is required for all agencies to support a clear and effective engagement and communication campaign to support landholders.

3) Inability to easily access integration information

The NVC believes that there could be greater information sharing and integrated processes, to support and assist fire management measures. Opportunities include:

- An integrated and easily accessible database where conditions or approvals relating to fire mitigation measures (e.g. conditions on new developments, approvals given by CFS for existing developments, etc.) are captured.
- Inclusion of all fire protection measures captured within a BMAP, ensuring subsequent landholders are aware of their obligations and also allowing for education and enforcement by local Council Bushfire Prevention Officers.

4) Landholders are not undertaking or maintaining approved or allowed clearance

Many landholders do not appear to be undertaking clearance to the extent allowed. This may be for a variety of reasons including landholders highly valuing the amenity and value of their native vegetation.

Increased community education (including fire behaviour in native vegetation, effective strategies to reduce fire impact, alternative options to burning and understanding that fire management does not require the complete removal of vegetation), would assist in addressing this issue.

5) Misunderstanding of fire behaviour

Analysis of fire behaviour shows that fine fuels (any vegetative materials less than 6mm wide) ignites the most easily and carries the fire front. Larger fuels such as tree branches and fallen logs typically don't burn in the fire front or carry the fire, and are far less combustible than the fine fuels. Furthermore, larger branches and logs do not contribute to the rate of spread or flame size.

In addition, where broad scale clearance occurs, weeds often replace native vegetation creating fine fuels and increasing fuel load. The removal of the 'wrong' type of vegetation or in the wrong way can make fuel loads worse.

While fuel reduction is the principal means to reduce the risks of bushfire, under catastrophic fire danger conditions bushfires can still burn across landscape with very low fuel loads, which may have been halted under milder conditions.

Landholders need to be educated in appropriate fuel management to provide the best protection for their properties.

6) Barriers to burning on private land

The NVC supports increased burning of native vegetation on private land and from enquiries made to the NVB, is of the view that landholders would want to undertake controlled burning, to manage fuel loads and help improve the condition of the vegetation.

However, implementing burns can be very difficult for landholders, due to the knowledge needed to adequately plan and undertake a burn in a safe and controlled manner. The approval to undertake these burns already exists with the Chief Officer of the CFS or delegate. Therefore the NVC proposes that further support is made available to enable landholders to plan and implement controlled burns.

Fire is an important tool in many farming operations to manage weeds and crop residue on occasion but also a preventative measure. Many Primary producers are well practiced at fighting wildfires in their regions, understand fire behaviour and different topography, vegetation types etc., and are normally the first on the fire scene long before CFS arrive. They often use fire to beat wildfire. Support needs to be provided to ensure primary producers can continue to undertake these practices.

7) Indigenous practices and culture

Fire is a very important cultural practice to indigenous peoples.

In SA there are First Nations communities that understand the vegetation change since Europeans impact. The methods vary depending on veg communities or not used at all in some delicate areas.

The issue we observe is that a lot of our native vegetation hasn't been allowed to be managed using fire for a long time therefore this will require critical assessment. Culturally significant sites which are protected from unintended fire (including scar trees) isn't enforced in fire management in SA and on most occasions not considered. This also must be considered in an active way going forward.

8) Effectiveness of BMAPs

The NVC recognises the significant effort and resources that have gone into the development of the BMAP, and commends all who have been involved.

Further enhancement of BMAPs could occur through:

- a. Providing details how such actions should be implemented such as the location and extent of the asset protection zone
- b. Translating Zone Standards into more user-friendly documents for landholders to access, understand and apply
- c. Introducing accountability and enforcement mechanisms
- d. Spatially describing zones to support understanding and enforcement

Where BMAPs or other plans propose burning regimes, these need to be appropriate for the ecological community regarding frequency and intensity. Mosaic burning is preferred for the best ecological and fire suppression outcomes.

Building our population's 'muscle' for fire management

I (Emily) provide, for your interest, some information and insights which may assist you in framing your recommendations in a productive way to the South Australian government at **Attachment B**.

I earn a living in the field of community engagement. My background in community engagement began with my first career role, working for the Victorian Government in response to the Esplin Inquiry in the early 2000's. Bruce Esplin was scathing about government's lack of engagement with the community – to build their prevention, preparedness, response and recovery. I was part of a small team who led the Victorian Governments 'Community Engagement about Fire on Public Land' work – developing the approach for engagement across government and training all our fire teams on how to build this into their annual work program. I have a deep interest in and passion around how communities are engaged about fire, stemming also from our families experience of Ash Wednesday in Aireys Inlet - our family sheltering on the beach while the Otway Region (and our community) exploded in flames.

It is vital that we achieve, as a State, an enduring population scale 'muscle build' around fire.

Our rapidly changing climate will require this. And we have to move fast, make the change endure and adapt quickly. Mother Nature will not be kind to us.

The structure in Attachment B stems from the health sector, in fact is attributed to the way in which governments tackle population health issues - such as smoking and obesity. While it may seem tempting, simply increasing the price of cigarettes or slapping a tax on sugar will never achieve population scale change. These things alone have an initial impact, but don't result in lasting change across a population.

What is proven to achieve population scale change – and population adoption of change – is a combination of fiscal, regulatory, supply/demand, social marketing, specific targeting and workforce development. I believe we need to apply this thinking to our fire management system in South Australia and I commend this thinking to you.

Summary of the authority and requirements for fire hazard reduction of native vegetation

Native Vegetation Act 1991 and Native Vegetation Regulation 2017

Clearance allowed for fire protection without approval:

20m around dwelling, 10m around building, 5m around property boundary (each side)

Clearance allowed with CFS approval (Chief Officer of CFS or delegate):

Approve clearance of native vegetation that is not otherwise permitted for Fuel reduction, Fuel breaks, Fire access tracks or Prescribed burning
The CFS is required to notify the NVC of any approvals that are granted.

Clearance allowed in accordance with BMAP without further approval:

BMAP (Bushfire Management Area Plan) developed by BMC (Bushfire Management Committee) and approved by SBCC (State Bushfire Coordination Committee) under Fire and Emergency Services Act 2005.

Clearance approved by Native Vegetation Council:

Clearance undertaken in accordance with a Bushfire Plan (e.g. DEW Park Fire Management Plan), or prescribed burning for ecological management.
The NVC has approved Standard Operating Procedures for DEW, SA Water and Forestry SA to undertake bushfire prevention activities on their land. This includes prescribed burning, managing fuel breaks and fire access tracks without the need to gain the further approval of the NVC.

Clearance required in emergency situations:

MFS, CFS and SES officers acting in accordance with Fire and Emergency Services Act 2005.

Native Vegetation Regulations 2017	
Regulation	Authority
clearance of vegetation that is growing or is situated within 10 metres of an existing building for the purpose of maintaining the building	No approval required
Clearance of vegetation that is growing or is situated within 20 metres of a dwelling (except trees with a trunk circumference of 2m or more)	No approval required
Clearance for a fire break that is a maximum of 5m wide along an existing fenceline.	No approval required
Clearance in accordance with a bushfire prevention plan	No approval - BMAP <i>Note, a bushfire management plan can also be approved by NVC or in accordance with a SOP approved by the NVC – DEW Fire Management Plans</i>

Clearance is undertaken by, or in accordance with a direction or determination of officers of the SA CFS, SA SES or SA MFS.	No approval - CFS, SES or MFS
Reducing combustible material on land where reasonably required for a purpose related to fire prevention or control approved by Chief officer of SA CFS	CFS approval
Clearance is for a fuel break that is max 20m on property used for primary production with approval of Chief Officer of SA CFS	CFS approval
Clearance of vegetation undertaken for the purpose of establishing or maintaining a fire access track up to 15m wide approved by Chief Officer of SA CFS	CFS approval

Native vegetation clearance during emergencies

In accordance with the Act and Regulations, registered firefighters (members of a CFS brigade) and contractors engaged in bushfire response can clear native vegetation whilst engaged in firefighting activities, subject to the following process.

In the initial stages of a bushfire, the most senior CFS Officer present must be directing these activities. Once an IMT is in place, the Incident Controller (IC) authorises the Incident Action Plan (IAP) which must outline actions to be undertaken. An Operations Officer can authorise tactical changes to IAP, based on changed field conditions. Major changes to IAP must be authorised by the IC. The powers of CFS Chief Officer currently cannot be delegated to a member of the public or a non-brigade member.

Establishing fuel reduction zones requires the assessment of both fire hazard and ecological values. CFS officers undertake the assessments but, in complex situations, do not have the training and knowledge to fully consider the ecological aspects. An annual training session is provided by the Native Vegetation Branch to the CFS Officers; however it is not possible to cover the diversity of vegetation and options for confident assessment in the field.

The management of native vegetation post fire is outlined in the [Native Trees in Burnt Areas FAQ](#).

Achieving enduring population scale change around fire

Fiscal

Increase the cost of things that you don't want to promote (i.e. soft drinks).
Reduce the cost of the things you do want to promote. (I.e. vegetables)

Regulatory

Change the rules / legislate.

Supply and Demand

Increase the availability and demand for things you want to promote and decrease the availability and demand for things you don't want to promote.

Social Marketing / Communications

Fund effective social marketing campaigns to increase behaviour

- Ensure that funding is sustained and at a sufficient level to allow adequate reach and frequency; and
- Choose messages most likely to reduce prevalence in high risk / key groups and provide extra reach to these groups

Phase out the marketing of things you don't want to promote.

Develop and adopt an appropriate set of definitions and criteria for determining minimum standards / expectations.

Specific Targeting of key sectors

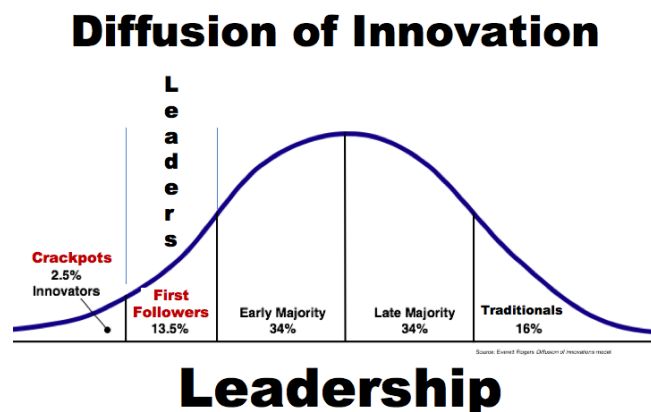
A range of push & pull interventions for key sectors who represent the first followers / early majority sectors on the Diffusion of Innovation scale.

Workforce development

Incentivise new, best practice.

Ensure there is access to what's needed to implement best practice.

Fund evidence based / no regrets trials and pilots to kick start innovation.



The NVC's ideas for achieving enduring population scale change include:

Approach	Ideas for what could be done
Fiscal	<ul style="list-style-type: none"> - Reduce or remove application fees for fire clearance - Provide resources to support appropriate fire clearance - Fine people in high risk areas who do not undertake appropriate clearance - Increase penalties for unauthorised fires - Invest heavily in early warning systems. The gold standard last summer would have been early advice about lightning strikes in remote areas followed by a concentrated aerial attack on the fire. Controlled burning of fuel is still required, but clearly failed us last summer. This is going to get a lot worse in coming decades so we need to focus on getting to the fires as quickly as we can
Regulatory	<ul style="list-style-type: none"> - Invest in making the regulatory system understood - Simplify planning processes - Ensure application processes are clear and easy to understand - Establish 'no-go' zones for living – high risk areas which also have high ecological value
Supply and Demand	<ul style="list-style-type: none"> - Assist landowners with increasing their knowledge about fire - Provide education about how to burn safely - Provide education about alternatives to burning - Assist landowners with knowledge about fire so they know when controlled burning is the best management option and when other approaches are more appropriate. There is strong evidence beginning to emerge from NSW and Vic that some control burns have led to more severe and damaging fires at some point in the future. Mechanical thinning and slashing are two alternate approaches. - Make available shared fire equipment – for local communities - Invest in understanding and implementing indigenous cool burning techniques
Social Marketing /Communications	<ul style="list-style-type: none"> - Communications campaigns around preparedness, prevention, emergency response and recovery - Language is important – fire is not necessarily bad – we need to distinguish and explain the differences between fire, bushfire and wildfire. - Education sessions (virtual) within communities which focus on building understanding and knowledge around fire and landscapes - Engage the community better to enhance their decision making capability during a fire event (i.e. to limit complacency)
Specific targeting of key sectors	<ul style="list-style-type: none"> - Work out 'who do people trust' within communities and then work with those trusted sources to support them to lead by doing - Continue working with councils and CFS – in a regional way, using the BMAP process – to make sound strategic policy and set decision parameters
Workforce development	<ul style="list-style-type: none"> - Invest in NV resources to be transferred to the CFS (i.e. 1-2 FTE's) to support them to deepen their knowledge of vegetation communities & their appropriate management - Establish Co-working arrangements with the CFS - Undertake research / development / trials to determine whether fuel reduction burning is the right option to adopt.

Native Vegetation Council Overview of our Role

The below is provided to explain in broader detail relevant aspects of the role of the Native Vegetation Council and is provided for interest.

Heritage Agreements

A Heritage agreement (HA) is established between the Minister and the landholder at the recommendation of the NVC. HA's are areas of high biodiversity value with limited impacts from threats such as pest plants and animals.

There are currently **1607 individual Heritage Agreements in South Australia** – where private landholders undertake protection and enhancement works 'for the greater good'. The Native Vegetation Council, in conjunction with other environmental and primary production partners, is developing a new program targeted at existing and potential heritage agreement owners. Large and small grant rounds will soon be on offer to support HA owners for works associated with increasing the biodiversity on their land.

Biodiversity Credit Exchange:

The Native Vegetation Council initiated the Biodiversity Credit Exchange Program in 2019. The program is aimed at incentivising conservation on private lands through the creation of credit sites. To date the NVC have bought credit from three landholders in the Northern and Yorke region. The landholders will receive a regular income over a period of ten years for maintenance of the site.

Clearance and Compliance

The following are excerpts from the Native Vegetation Councils Annual Report for the 2018-19 financial year. As we are three quarters through the current financial year not all data is available.

To date in 2019-2020 there have been 130 clearances approved, 9 withdrawn, and 2 refused applications. Therefore of the 132 applications that progressed to a decision in this reporting period, the NVC approved 98.5%.

An excerpt of Compliance data is also provided as follows, however further information can be found in the Native Vegetation Council Annual Report 2018-2019 <https://www.environment.sa.gov.au/about-us/our-reports/annual-reports>

Table 1. Clearance statistics for comparison of financial year 2017-18 and 2018-19

Clearance	Financial Year 2017-18	Financial Year 2018-19
Clearance Application under section 28	18	18
Clearance Application under section 28 withdrawn	N/A	3
Hectares under section 28	42.99	19.232
Brush cutting under Section 28	N/A	268.7
Total approval under Section 28	N/A	287.932
Trees under section 28	62	52
Applications under Regulation	176	178
Applications under Regulation withdrawn	N/A	14
Applications under Regulation refused	N/A	2
Hectares under Regulation	4,069	2079.682
Hectares approved under Management Plan (change of grazing regime or ecological management)	N/A	40,382
Total Hectares approved under Regulation	N/A	42,461.682
Trees under Regulation	735	678
\$ SEB under section 28	111,018.91	461,473.19
\$ SEB under Regulation	8,497,684.77	7,018,590.23
Hectares SEB offset under section 28	774.08	102.09
Hectares SEB offset under Regulation	1,500.78	11,239.51

Table 2 shows clearance by delegation to the relevant regulatory agency for the 2018-19 financial year.

Table 2. Clearance decisions under Regulations by delegation 2018-19

Organisation with delegated officers	No of clearance decisions	Ha Native Vegetation cleared	Trees Removed	Committed SEB \$	Committed on-ground SEB (ha)
DEM Energy	3	372.3	0	151,588.62	0
DEM Mining	7	588.58	2	211,756.56	3,318.52*
SA Water	13	16.1	14	252,953.66	2.4
DPTI	67	745.93	258	3,973,044. 81	0
Forestry SA	1	8.3	0	0	0
SA CFS	17	2408.45 ⁺	2	0	0

*Nominal figure based on SEB points divided by 8. On-ground SEB satisfied through a third party provider.

⁺2408ha approved under delegation, yet works conducted by DEW Fire and is reflected in their statistics also.

Table 5 shows the number of compliance reports received by DEW/NVC since 2010, including those identified through the change detection program.

Table 5: Reports received by NRM Region 2010-11 to 2018-19

NRM Region	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	
									Reports received	CDP identified
Adelaide & Mount Lofty Ranges	50	53	61	60	21	29	30	38	51	0
Alinytjara Wilurara	0	0	0	1	0	0	0	0	0	0
Eyre Peninsula	34	14	17	22	34	11	32	26	5	4
Kangaroo Island	14	15	10	11	4	8	13	19	8	6
Northern & Yorke	28	29	24	25	8	14	21	12	15	4
SA Arid Lands	1	1	2	1	0	0	1	3	2	0
SA Murray Darling Basin	36	36	34	34	22	25	21	29	38	0
South East	48	33	26	23	13	22	20	16	15	47
Sub-total	211	181	174	177	102	109	138	143	134	
Change Detection Program	0	50	41	22	28	31	40	54		61
TOTAL*	211	231	215	199	130	140	178	197		195