



260 Franklin Street,
Adelaide SA 5000

Phone: (08) 7127 4630

Fax: (08) 8231 9773

Email: ncssa@ncssa.asn.au

Website: www.ncssa.asn.au

ABN: 40 538 422 811
GST registered

Mr Mike Wouters
Senior Fire Ecologist
Fire Management Unit
Department of Environment, Water and Natural Resources
GPO Box 1047
Adelaide SA 5001

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Re: Comments on Draft Strategic Assessment Report of DEWNR Fire Management

Dear Mike,

The Nature Conservation Society of SA (NCSSA) welcomes the opportunity to provide comments on the draft Strategic Assessment Report of DEWNR Fire Management. As South Australia's primary nature conservation advocacy organisation, the NCSSA has an active interest in the protection and conservation of South Australia's natural resources with particular attention being paid to nationally and state listed threatened plants, animals and ecological communities and the management of protected areas.

Since 1962, NCSSA has played a key role in establishing and expanding the reserve system in South Australia by promoting the protection of key biodiversity assets through the dedication of reserves and by undertaking ecological research to inform their management. Our current and past activities also address the significant need for ongoing management and resourcing of a range of issues within parks including fire management and broader education of the wider community in relation to these matters.

NCSSA commends the considerable work being undertaken by DEWNR to protect our parks and public lands when applying fire management policy. We value the collaboration and support from DEWNR in providing assistance for ecological burns associated with our projects and partnerships and look forward to continued collaboration and learning on the projects where fire management has an important role in long term biodiversity conservation.

Please refer to the following pages for our comments on the draft Strategic Assessment Report. If you would like to clarify or discuss any of the points raised please contact me on (08) 7127 4633 or via email at nicki.depreu@ncssa.asn.au

Yours sincerely,

Nicki de Preu
Conservation Ecologist
Nature Conservation Society of South Australia

NCSSA comments: Draft Strategic Assessment Report of DEWNR Fire Management & Policy for Approval of under the EPBC Act

General Comments

The NCSSA consider the draft report to be comprehensive, well structured and written. We commend DEWNR for releasing the draft report for public consultation and efforts to provide greater transparency in how Matters of National Environmental Significance (MNES) are considered in relation to the impacts of prescribed burning programs. We support the general framework for undertaking prescribed burning operations as outlined in the Environmental Assessment and Management Policy and believe that with some reform including improved reporting and independent review that a more streamlined EPBC approval process will be achieved. We have a number of concerns regarding the draft report and policy and provide the following comments and recommendations to be considered in finalising these documents.

Specific Comments on Draft Strategic Assessment Report

Executive Summary

Paragraph 3, page i

Does the policy also refer to lands managed by Forestry SA and SA Water as well as land managed directly by DEWNR? If so it should be explicitly stated.

Paragraph 8, page i

NCSSA recommends the last sentence in this paragraph should demonstrate greater commitment by DEWNR to implement mitigation measures to protect MNES through the Prescribed Burn Plan or Works Plan. The current wording that “mitigation measures may be applied” suggests that they may be applied in some situations and not in others. If this is the case then further clarification of when mitigation measures will or will not be applied is required rather than leaving it open to interpretation.

Paragraph 9, page i

NCSSA strongly support the statement that prescribed burning can be used to achieve conservation management objectives and the need to refer to existing Recovery Plans, expert advice and research for threatened species in relation to ecological prescribed burning programs.

Paragraph 4, page ii

NCSSA support the statement that the “do-nothing” option i.e. not undertake fire management activities carries an unacceptable risk of catastrophic damage to MNES along with life and property and is not consistent with ecologically sustainable development.

Paragraph 5, page ii

NCSSA support the intention to ensure that actions are not taken that will adversely impact on Ramsar wetlands. Although we recognise the Policy focuses on conservation of species and ecological communities at the landscape level we recommend that the 3rd sentence be revised to say “That although adverse impacts may occur at the site level these will be avoided wherever possible”.

1.2 Drivers of DEWNR Fire Management

NCSSA acknowledges the need for a more proactive approach to fire management as a result of catastrophic bushfires both in South Australia and interstate and inquiries into these. We also acknowledge the directive from the South Australian Government in response to these events to conduct a program of prescribed burning and other bushfire mitigation activities to reduce bushfire impacts to life and property through annual burning on five per cent of high risk public land. The NCSSA believe that this target, taken from the 2009 and 2010 Victorian Bushfire Royal Commission Inquiry and Report requires comprehensive review in relation to prescribed burning operations in South Australia. We would welcome the opportunity to be involved in such a review.

The current approach to prescribed burning includes programs where a large component of the target is conducted in areas within Conservation Zones to achieve the five per cent outcomes. The NCSSA has serious concerns about the lack of clear objectives for undertaking prescribed burning programs in these zones in order to reach the target area rather than primarily for ecological and conservation management objectives.

2.1 DEWNR Fire Management Area

NCSSA acknowledges the statement that “The occurrence of fire and fire regimes varies widely across DEWNR managed land” with a large proportion of these in the northern and western parts of the state that are remote from agricultural areas and towns. We support the focus for DEWNR’s fire management program “fire-prone” areas as shown in Map 1 although, given the focus of prescribed annual burning in high risk public land in the Adelaide Mount Lofty Region, we strongly recommend an additional map is included showing the areas considered high risk in this region. We also recommend that the existing map show the high risk areas across the state so that it is clear where the priorities for prescribed burning to protect life and property occur.

2.2.1 Prescribed burning

NCSSA recommends that the first dot point under the list of points relating to the primary objective for a prescribed burn is amended to state “reduce fuel hazard immediately adjacent to built or environmental assets”. We do not support the last dot point as a primary objective for undertaking a prescribed burn. Information on fire behaviour and ecological responses to fire is, and should be, a key outcome from all prescribed burns used to inform future management activities rather than a primary objective in its own right.

The NCSSA supports the requirement for ecological burns to have a clear statement of, and justification for, burn objectives. We also recommend that all landscape protection burns and fuel reduction burns should have clearly stated objectives and justifications.

2.4.4 Community consultation

NCSSA recommends the inclusion of NRM District Groups (where they exist) on the list of organisations likely to have a strong interest in or knowledge of the area in relation to Fire Management Plans. We would also recommend that dot point 10 is amended to include interstate based NGO’s such as Australian Wildlife Conservancy and Bush Heritage Australia that manage significant areas of land in South Australia.

Page 11, last paragraph

Draft FMPs are also available on the DEWNR website during public consultation phase of plan development.

3.2.4 Impacts of fire on biological MNES

NCSSA agrees with the statement that “Fire is a natural component of the South Australian environment and plays an important role in determining the biodiversity and maintenance of ecosystem processes in our native vegetation”. Given the focus on fire management in “fire-prone” areas in the settled and agricultural parts of the state in both the report and policy we strongly recommend that both documents acknowledge the importance of habitat fragmentation as a significant factor to be considered in relation to fire management. Such fragmentation adds an extra layer of complexity to management of species and ecological communities and for this reason “ecological” burning may be more detrimental than beneficial for some areas/species.

Table 4 indicates that high intensity fires may contribute to species extinction through the “depletion of standing plant and animals through heat induced death of vital organs”. We recommend this is amended to state heat induced death of vital organs and tissues to make it more applicable to both plants and animals.

Predation by pest animals

Foxes and feral cats occur in high numbers across large parts of South Australia not only southern areas. NCSSA recommends amending the text to reflect this.

Weeds

NCSSA would recommend amending the wording of the last sentence in this section to say “high weed levels exist in some areas of native vegetation in the Mount Lofty Ranges”.

Prescribed burning escapes

NCSSA would recommend amending the wording of the 2nd sentence to indicate that escapes from prescribed burning “have resulted in unintended impacts on species and communities of conservation significance” in addition to “can result in”. The Cox Scrub fire is one such recent example that had a direct impact on habitat for the EPBC listed Chestnut-rumped Heath-wren and Southern Brown Bandicoots.

4.2 Fire Management Zoning

NCSSA supports the use of fire management zones described in Table 9 to mitigate landscape scale risks and the inclusion of highly valued environmental assets within the Asset Protection Zone (A-zones). We strongly recommend that alternative methods for fuel reduction are used in areas within A-zones where species and ecological communities of conservation significance are known to occur.

We also support the need for bushfire buffer zones (B-zones) to be established where there is a high risk that the whole of a reserve or remnant block of vegetation could be burnt in one event.

As stated in Section 1.2 we have serious concerns in relation to the landscape scale burning of Conservation Zones for poorly described objectives to achieve the 5% area target that makes up the vast majority of DEWNR's fire management activities.

4.2.2 Impacts on MNES

NCSSA acknowledges that A-zones constitute less than one per cent of the landscape and that these areas have generally been on the edge of urban areas. We do not support the statement that "these areas are unlikely to contain important habitat for EPBC listed species and communities" and strongly recommend that this section of the report make further reference to the precautionary principle.

4.3 Prescribed Burn and Works Plans

NCSSA strongly supports the use of prescribed burn and work plans to ensure that MNES are thoroughly considered at the site level and specific mitigation measures are implemented to address impacts on MNES. We also support the use of monitoring programs to evaluate the effectiveness of mitigation measures to further inform Ecological Fire Management Guidelines, fire management planning and operations. We would recommend that unsuccessful mitigation measures should also be documented to enable continued learning on the most effective and appropriate management strategies for particular species or ecological communities.

4.3.2 Impacts on MNES

NCSSA recognises the challenges in undertaking surveys for rare and cryptic species that may only be present at a particular site during specific times of the year. Unfortunately, based on our previous experience, the impact of actions on MNES cannot always be conclusively evaluated. Low detectability of species and the complexities of defining critical habitat are two factors that contribute to this uncertainty. It is vitally important that the precautionary principle is applied in circumstances where there is uncertainty or lack of information. We recommend that repeat surveys are conducted in areas where MNES are known to occur or suitable habitat exists and further reference to the precautionary principle in this section of the report.

NCSSA strongly recommends that ongoing monitoring of MNES is clearly defined and resourced in the policy document.

4.4 Ecological Fire Management

NCSSA supports the statement that the management of fire to maintain or enhance biodiversity is based on accumulating knowledge of flora and fauna species, population and communities and response to fire regimes. We believe that an adaptive management approach that involves continued review and evaluation of monitoring programs and refinement of management is fundamental to fire management practices to maximise biodiversity outcomes.

4.4.1 Ecological Fire Management Guidelines

NCSSA strongly supports the application and further development of Ecological Fire Management Guidelines (EFMGs) to guide land managers on fire regimes that are appropriate for the management of biodiversity conservation values for fire-prone vegetation communities that occur in South Australia, including MNES. We support the five steps listed on Page 29 to determine the EFMG for a particular vegetation type address the key areas required to develop these guidelines. We strongly recommend that thresholds of potential concern (TPC) relating to the fire interval component of the fire regime being applied at a particular site and the time since the last fire on that site are included in public notifications of individual prescribed burns.

4.4.2 Ecological Fire Management Strategies

NCSSA strongly supports the application of ecological fire management strategies to specific threatened or pest species for which fire is a critical threat or management tool. We consider this to be a scientifically rigorous approach aimed at developing specific and clear ecological objectives for species, habitats and ecological communities and measurable targets to assess impacts of mitigation measures.

4.4.3 Ecological Burning

NCSSA strongly supports the statement that fire is a natural part of many of South Australia's ecosystems but would recommend amending the last part of the first sentence to state that "important for maintaining biodiversity over time in some ecological communities". There has been considerable research in South Australia and interstate that demonstrate that inappropriate fire regimes can result in a decline in biodiversity values in certain ecological communities that should be recognised and referred to in this section.

NCSSA strongly recommends the draft report and policy place further priority on the protection of tree hollows in prescribed burning programs. A recent report on vegetation condition in the SAMDB Region by O'Connor NRM found that 44% of Bushland Condition Monitoring (BCM) sites (more than 600 sites in the region) were in poor or very poor condition with respect to tree hollows. The 2013 State of the Environment Report found that 69% of BCM sites in the AMLR region are in poor condition for tree hollows and in the NY only 40% of sites are in good or excellent condition for tree hollows.

NCSSA support the further investigation of the use of prescribed burning to control weeds as part of an integrated approach combined with mechanical, chemical and biological control agents. We strongly recommend that minimum disturbance weed control techniques are also included in this section as they have proven highly effective in some of the high risk public lands in the AMLR region.

4.4.4 Impacts on MNES

Although NCSSA recognise the complexities of maintaining appropriate fire regimes a range of species and ecological communities we do not support the statement in paragraph 2 that "a fire regime which favours one species may eventually result in the loss of the other species" albeit at a landscape scale. The intention should be to maintain the maximum biodiversity conservation values across the landscape through DEWNR's prescribed burning programs and avoid, wherever possible, local species extinctions.

NCSSA acknowledge that there are still large knowledge gaps relating to the vital attributes of many flora species and the habitat requirements and life history details of fauna species. We recommend the timeframe for updating EFMGs and EFMSs as new data and information becomes available is clarified in terms of how often this will occur i.e. will it be updated on a regular or ad-hoc basis as new information becomes available?

6 ASSURANCE FRAMEWORK

6.1 Fire management outcomes

Outcome 1: Fire management is based on the best available science relating to MNES

NCSSA supports the intention for DEWNR to use adaptive management to address the considerable uncertainty involved in both fire management and biodiversity conservation and the need for rigorous and long-term monitoring data to support fire planning and evaluation of impacts.

We strongly support the regularly review and evaluation of monitoring measures and indicators but would recommend that the draft report and policy are amended to include specific timeframes for these to occur rather than "after a suitable period" as currently stated.

Outcome 2: Implementation of the Policy protects and enhances MNES at the landscape level

NCSSA does not accept that the implementation of the Policy as presented protects and enhances MNES at the landscape scale given that the vast majority of prescribed burning to achieve the five per cent target is occurring within conservation zones on an annual basis. NCSSA has significant concerns that this approach is not providing the best outcomes for life and property or the environment.

We strongly support the need for ongoing analysis and evaluation of landscape fuel management achievements to assess the status of landscape ecological fire regimes. We strongly recommend that this information is made publicly available at the end of each year via the FireMaps website.

NCSSA also strongly support the extension of the evaluation approach beyond DEWNR managed lands to achieve more effective environmental indicators across the landscape.

Outcome 3: Individual prescribed burns that present a high residual risk to MNES do not proceed unless the residual risk to life and property, after considering all practical mitigation measures, is very high or extreme.

NCSSA strongly support the requirement for full and thorough consideration to be given to MNES when undertaking prescribed burns.

Outcome 4: Other than in circumstances specified in Outcome 3, individual prescribed burns do not significantly impact on MNES

NCSSA has serious concerns that this outcome will not be achieved given that the vast majority of prescribed burning to achieve the five per cent target is occurring within conservation zones on an annual basis. As stated in the Executive Summary and section 4.4.4 of the report DEWNR's prescribed burning program may "have adverse impacts on MNES at particular sites" that NCSSA takes to mean could result in the extinction of local populations. This matter is of particular importance in the agricultural areas where habitat fragmentation can have a significant effect on the ecology of the species/communities affected.

6.2 Reporting

The NCSSA strongly recommend that annual reports of the prescribed Burn/Significant Works environmental assessments submitted to the Native Vegetation Council should be made publicly available in order for the process to be open and transparent. We also recommend that both beneficial and negative impacts from the prescribed burning program on MNES, including where prescribed burns escaped, unintended consequences and lesson learnt are included in such reports. Such information would enable DEWNR to be more accountable and demonstrate to the public and Australian Government that the negative impacts of prescribed burning programs are outweighed by the positive impacts as stated in the report.

6.3 Auditing

NCSSA strongly recommends that regular formal audits of DEWNR's prescribed burning program should have already occurred given the extent of program activities since 2003. In order for the process to be more transparent, we would strongly recommend that audit and review of the policy is conducted by an independent third party authority rather than internally by DEWNR Staff.