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Ms Faye Morten  
A/Fire Management Officer - Planning  
Department of Environment, Water and Natural Resources  
GPO Box 1047, Adelaide SA 5001

January 22, 2015

**Re: Comments on Northern Flinders Ranges Draft Fire Management Plan**

Dear Ms Morten,

The Nature Conservation Society of South Australia (NCSSA) appreciates the opportunity to comment on the draft Fire Management Plan for the Northern Flinders Ranges.

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.

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 monitoring both within parks and across the broader landscape to provide long-term conservation of biodiversity.

We consider the Northern Flinders Ranges to be an extremely important area for biodiversity conservation in South Australia due to the high species diversity, including many endemic species that do not occur elsewhere. We strongly support the need for increased knowledge and understanding of the role of fire to manage and protect the ecosystems that occur in this area.

Please refer to the following pages for our comments on the draft Fire Management Plan that we anticipate will be of assistance in finalising the plan. 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](mailto:nicki.depreu@ncssa.asn.au)

Yours sincerely,

Nicki de Preu  
Conservation Ecologist  
Nature Conservation Society of South Australia

## **NCSSA comments: Draft Northern Flinders Ranges Fire Management Plan**

### General Comments

The NCSSA acknowledge the importance of a landscape approach to fire management planning and commend DEWNR for the approach taken in the current plan. We consider the draft plan to be mostly well written and adequately researched, however, consider the document lacks detail and sufficient information in some key areas.

### Specific Comments

#### **1. Scope and Purpose**

We support the scope and purpose of the plan and acknowledge the connection of the Adnyamathanha people with the land covered by the planning area and role in Co-management of Vulkathunha-Gammon Ranges NP (V-GRNP) and Ikara-Flinders Ranges NP (I-FRNP) and direct management of other landholdings in the region.

#### **1.1 Objectives**

##### *Page 2: General Objectives for Fire Management*

We strongly support the inclusion of the environment as an asset to be protected from the risk of bushfire events alongside life and property. We also strongly support the objectives to apply sound conservation and land management principles to fire management activities and an adaptive management approach to fire management on Co- and DEWNR managed lands supported by contemporary research and monitoring.

##### *Page 2-3: Objectives for Fire Management in the Northern Flinders Ranges planning area*

We strongly support the objectives to reduce the impact of bushfire in the reserves within the planning area to minimise the likelihood of large areas being burnt in a single fire event and subsequent impacts of such events on threatened species and ecological communities.

We also support the inclusion of revegetation and reintroduced assets as a key factor to be considered in relation to fire management planning for the Northern Flinders Ranges.

#### **2.3.1 Land management**

##### *Page 6, Paragraph 3:*

We support the objectives for fire management within I-FRNP in terms of managing habitat for the Short-tailed Grasswren and research in to the spread of Vinba. We recommend that the wording of the sentence '.....creation of Spinifex habitat for Short-tailed Grasswrens' is amended to 'management of Spinifex habitat to support the Short-tailed Grasswren population'. Any fire in these areas (including ecological prescribed burning) has the potential to destroy habitat for this species and potentially result in local extinctions so the objective of habitat creation is not strictly correct.

#### **3.1.1 Location and included lands**

##### *Page 9, Figure 1:*

The boundary of the Bushfire Management Area is not shown on the current version of the map. We recommend that Warraweena Private Conservation Park and Pinda Springs Heritage Agreement are shown on the map along with the township of Copley and secondary roads linking Wilpena to Arkaroola and Copley to Arkaroola.

We also recommend that Arkaba Station is included as a pending Heritage Agreement as negotiations are currently in progress to change the existing land tenure from perpetual pastoral lease to private sanctuary or heritage agreement.

This section should also acknowledge that the area forms an important part of the Flinders-Olary NatureLink and therefore collaboration across park boundaries and adjacent landholding should be considered wherever possible to achieve biodiversity outcomes.

### **3.1.2 Surrounding Land Use**

*Page 11, Paragraph 2:*

We recommend that this paragraph acknowledge the importance of Arkaroola Protection Area for its biodiversity conservation values as a large number of nationally and state listed species are known to occur there along with regionally rare species and ecological communities. Arkaroola also contains a large number of Yellow-footed Rock-wallaby colonies and due to its location adjacent to V-GRNP is extremely important for long-term conservation of this species.

### **3.6.4 Natural Values**

*Page 21, Paragraph 1:*

We recommend that this section acknowledge the existence of additional datasets, local landholder and specialist knowledge that are not currently accessible in the Environmental Database of South Australia. Other databases such as the Atlas of Living Australia and BirdLife Australia also provide important sources of data in relation to the natural values of the planning area.

*Page 21, Last Paragraph:*

We strongly support DEWNR's commitment to increasing its capacity to incorporate species' requirements into improved ecological fire management and the application of a landscape scale to biodiversity conservation. We consider this to be an extremely important component of fire management planning for the area.

### **Flora, Fauna and Ecological Communities**

*Page 22, Paragraph 3:*

We acknowledge that Appendices 2 and 3 contain lists of species of conservation significance as well as species that are considered important in terms of fire management (see specific comments on Appendices 2 and 3 below). We strongly recommend that the list of rated species include key plant species such as the Spidery Wattle (*Acacia araneosa*) and Slender bell-fruit (*Codonocarpus pyramidalis*) rather than only fauna species as currently listed. We also recommend that the River Redgum ecological community is included as the health and condition of this community can be severely impacted by bushfires.

*Page 22: Short-tailed Grasswren*

We recommend the text note that there are records of this species from I-FRNP, Willow Springs, Arkaroola, Vulkathunha-Gammon Ranges NP (V-GRNP) and east of Hawker between the Black Range and Belton within the planning area (Carpenter, 2004) as well as further south around the Dutchman's Stern and Buckaringa Gorge.

*Page 24, Management strategies for the Short-tailed Grasswren*

We recommend amending the wording of Strategy #25 as the intent is unclear and somewhat technical (i.e. areas exceed suitable threshold). Further explanation in the text on Page 23 may be required to support this.

*Pages 26-27: Spinifex Hummock Grassland*

The plan should acknowledge that this ecological community is also known to occur on Willow Springs (Stokes Hill adjacent to I-FRNP), Arkaroola, the south-western side of V-GRNP from Arcoona Bluff to Mount McKinlay and pastoral properties east of Hawker between the Black Range and Belton (Carpenter, 2004).

## **3.7 Abundant and Pest Species**

### **3.7.1 Fauna**

*Page 27*

The NCSSA strongly supports the statement that 'grazing by abundant herbivores may have a negative impact on the post-fire recruitment of vegetation communities'. We strongly recommend that this section recognise the overabundance of Euros and Red Kangaroos within some parts of the planning area as a critical issue to be considered in managing vegetation recovery post-fire. We also recommend that this section that kangaroo numbers have increased across the pastoral areas inside the Dog Fence due to the

provision of artificial water sources for stock, exclusion of the Dingo and broad scale fox baiting programs on most reserves and some private landholdings as part of the Bounceback program.

We strongly recommend that the common names of the following feral animals are amended: Goat to Feral Goat, Fox to European Red Fox, Cat to Feral Cat and Donkey to Feral Donkey.

### **3.7.2 Flora**

*Page 28*

We strongly recommend that *Opuntia* and *Cylindropuntia* species are added to the list of significant weed species within the planning area in addition to other priority weed species from the Weed Management Strategy for the Northern Flinders NRM District (Reseigh & Shepherd, 2010). We also recommend paragraph 3 refer to this Strategy and that management strategies for priority species are included in the plan.

Paragraph 4 of this section states that 'Monitoring programs should ensure that vulnerable areas are evaluated pre- and post-fire to determine what post-fire control weed control is required and to assess the effectiveness of weed control efforts.' We recommend that further detail is provided of what constitutes 'vulnerable areas' and who will undertake monitoring of these areas pre and post-fire weed control to assess the effectiveness of control efforts.

### **Buffel Grass**

*Page 28-29*

We recommend that this section refer to the Threat Abatement Advice for Buffel Grass (Department of Environment, 2014).

### **3.7.3 Plant Pathogens**

*Page 29*

We recommend that a link to the Standard Operating Procedure to minimise the risk of Phytophthora infestation is included in the plan.

### **4.1 Risk Assessment**

We recommend that the Pinda Springs HA, Arkaroola Sanctuary and proposed HA or Sanctuary on Arkaba Station is included in Table 5 and Figure 2.

### **7.2 Research**

We strongly recommend that research into the fire response of nationally and state listed species of conservation significance is identified as a research priority for the management strategies in this section.

### **7.3 Monitoring**

*Page 53, Paragraph 1:*

We consider the statement that 'Implementation will depend on state and regional priorities and available resources' to be inadequate in terms of the objectives of the plan. If we are to improve knowledge about the response of species, communities and habitats to fire effective pre and post-fire monitoring is an essential part of that process and should be adequately resourced.

### **Appendix 2: Fire Responses of Rated, Significant and Introduced Species**

*Pages 71-77*

In terms of clarity, we strongly recommend that Fire Response of Rated and Significant Flora Species should be in a separate Appendix from Introduced Species. We recommend that the information concerning rated and significant flora species is incorporated in to Appendix 4.

We strongly recommend that *Opuntia* and *Cylindropuntia* species are added to the list of significant weed species within the planning area in addition to other priority weed species from the Weed Management Strategy for the Northern Flinders NRM District (Reseigh & Shepherd, 2010).

There is a considerable amount of missing and incorrect data in this table and we strongly recommend that it is thoroughly reviewed and edited before finalising the plan.

A few examples are listed below:

*Page 73*

Onion Weed occurs on V-GRNP, Bunkers CR and Arkaroola not just I-FRNP as listed in the draft plan.

*Page 73*

The draft plan does not show reserves where Buffel Grass is known to occur.

There are a number of known records of the Slender Bell-fruit from I-FRNP, Bunkers CR and Arkaroola while the draft plan only lists this species for V-GRNP.

*Page 76*

There are a number of known records of Sandalwood from I-FRNP, Bunkers CR and Rawnsley Park HA while the draft plan only lists this species for V-GRNP.

*Page 77*

Delete asterix against NPW Act Status for Silky Swainson-pea and Great Sun-orchid.

### **Appendix 3: Fire Responses of Rated and Significant Fauna Species**

*Pages 78-85*

There is a considerable amount of missing and incorrect data in this table including NPW Act Status, and regional ratings. We strongly recommend that it is thoroughly reviewed and edited before finalising the plan. In particular the occurrence of listed species on reserves needs to be reviewed.

A couple of examples are listed below:

*Pages 79-80*

Three bird species that are rated as rare at the subspecies level are included in the table (Hooded Robin, Jacky Winter and Blue Bonnet). Given that other species rated as rare under the NPW Act are not included in the draft plan we question why these ones are as they are not of particular significance. We recommend they are deleted and replaced with species that have higher conservation ratings e.g. Dusky Hopping Mouse, Australian Bustard and Shy Hylacola (that have been recorded from I-FRNP and V-GRNP).

*Page 81*

The draft plan shows the Purple-spotted Gudgeon with a rating of CE under the NPW Act while there is no such rating under this Act. Also there are no records of this species from I-FRNP.

### **Appendix 4: Ecological Communities of Conservation Significance**

*Pages 86-90*

All of the ecological communities listed in this table occur on the Bunkers CR, Arkaroola Protected Area and Rawnsley Park HA in addition to I-FRNP and V-GRNP. We recommend the information is updated to reflect this.

### **Summary of Codes Used in Appendices**

*Page 91*

We recommend including the Regional Rating Codes in this section.

We also recommend that Arkaroola Protection Area is included in the table of Reserves covered by the current plan given its importance for biodiversity conservation and that adoption of its management plan is the responsibility of the Minister for Environment, Sustainability & Conservation.

## References

- Carpenter, G. (2004) Population trends in Short-tailed Grasswrens *Amytornis merrotsyi* in the central Flinders Ranges, South Australia – Spring 2003. Report to the Nature Foundation & Department of Environment and Heritage.
- Department of Environment (2014) Threat Abatement Advice for Ecosystem Degradation, Habitat Loss and Species Decline in Arid and Semi-Arid Australia due to the Invasion of Buffel Grass (*Cenchrus ciliaris* and *C. pennisetiformis*)
- Reseigh, J. & Shepherd, B. (2010) Northern Flinders NRM District Weed Strategy. South Australian Arid Lands Natural Resource Management Board, Port Augusta, SA.