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To whom it may concern

RE: Development of the South Para Fire Management Plan.

Thank you for the opportunity to provide input to the development of the South Para Fire Management Plan.

The Conservation Council of South Australia (The Conservation Council) is the Peak conservation body for South Australia representing over 50 of the State's environment and conservation organisations.

We take a strong interest in fire management issues throughout South Australia including the South Para Planning Area.

Kind regards

A handwritten signature in black ink that reads "Tim Kelly".

Tim Kelly
Chief Executive

| Question 1 Please indicate the area/s that your comments relate to (if relevant): Entire South Para planning area; or select all that apply below | | |
|---|--|--|
| DENR Reserves | SA Water Reserves | ForestrySA land |
| All DENR Reserves Cromer CP Cudlee Creek CP Hale CP Kaiserstuhl CP Kenneth Stirling CP Montacute CP Para Wirra RP Para Woodland CP Sandy Creek CP Warren CP Gawler Buffer project site _____ | All SA Water land Barossa Reservoir Kangaroo Creek Reservoir Little Para Reservoir Millbrook Reservoir South Para Reservoir Warren Reservoir _____ | Mount Crawford Forest Plantation forests Coralinga NFR Cudlee Creek NFR Kaiserstuhl NFR Kersbrook NFR Little Mt Crawford NFR Mount Gawler NFR Tower Hill NFR Watts Gully NFR _____ |
| CP – Conservation Park; RP – Recreation Park; NFR – Native Forest Reserve | | |

Question 2: What do you consider to be the major bushfire threats to life, property and environment in the area?

The major bushfire threats to life and property are caused by fire ignition on days of high, extreme and catastrophic fire danger, characterised by conditions such as strong winds, extremely dry fuel loads and high temperatures. Coupled with these environmental factors are the placement of human dwellings and settlements within this region of high fire danger, the design of dwellings and settlements, and the annual fire preparedness of these dwellings and settlements. The final factor is human awareness and behaviour.

The major bushfire threats to life and property can therefore be summarised as:

- The natural climate conditions of the area on days of high to catastrophic fire danger
- Placement and design of dwellings and human settlements as consequence of history and more recent planning decisions
- Annual fire preparedness in and around human dwellings and settlements
- Natural ignition sources such as lightning
- Human ignition sources associated with behaviour and poor situational awareness including:
 - Unintentional yet careless starting of fires by such things as slashers, mowers, angle grinders and burning off.
 - Unintentional ignition sources from infrastructure failures such as from power lines and transformers.
 - Intentional reckless and criminal acts such as arson including the burning of stolen cars

The major bushfire threats to the environment include:

- The natural climate conditions of the area on days of high to catastrophic fire danger
- Uncontrolled highly flammable weeds such as pine trees, broom, gorse and blackberry
- Natural ignition sources such as lightning
- Human ignition sources associated with behaviour including all human ignition sources previously described
- Prescribed Burning, most notably
 - Area driven prescribed burning rather than science based prescribed burning. The science should be informing each prescribed burn and other activities to

provide the greatest protection to human settlements or to provide benefits for biodiversity. The activity should not be driven by targets for burning activity, areas or % of areas to be burnt each year

- Lack of preparation in advance of prescribed burning such as baseline assessments and protection of significant trees and significant habitat
- The timing of prescribed burning
- The follow-up after prescribed burning such as monitoring of biodiversity recovery, weed invasion and control, duration of reduced fine fuel loads.

Question 3: What fire management issues do you see as the highest priority?

The Conservation Council believes that the highest fire management priorities should include:

- Continued improved planning processes and standards so that we build new dwellings and settlements placed and designed to minimise their fire risk
- A mandatory fire awareness course and workshop for all new residents moving into the high fire danger area so that people are made aware of basic bushfire dangers and the steps they can take to prevent the starting of bushfires including much greater awareness of the dangers of starting fires from mowers, slashers, angle grinders and welders. Awareness workshops to include information about the natural environmental assets of the region and information from ecologists on how fire management integrates with biodiversity protection. Improved bushfire protection in the areas immediately within and surrounding human settlements including:
 - Targeted asset protection burns in the areas where these are the most effective approach to create an asset protection buffer or control fuel loads.
 - Targeted non burning actions to address the fire risk in high conservation habitat or the presence of rare or threatened flora and fauna.
 - Council coordinated clean up days where flammable items and highly flammable vegetation can be removed (similar to cyclone clean ups in northern Australia, where people leave projectiles and hard rubbish on the kerb for collection);
 - Improved hard rubbish collection and recycling to be established in the region to reduce backyard fire traps and roadside dumping.
 - Locally coordinated resident fire safe groups and in event of fire, completed action plans for these groups and small communities to follow.
 - Improved capacity for landholders to create low maintenance, low fire risk native ecosystems, incorporating selective clearance of strata. This needs to replace the frequently used strategy of complete clearance of vegetation, which requires more intensive ongoing maintenance. Completely cleared areas, if left unmaintained, risk extensive weed invasion or ecological succession to a vegetation type of high fuel load.
- All committees and decision making processes to involve representatives for the environment, given the three-way emphasis on life, property and the environment in the Plan.
- Any prescribed burning to be accompanied by a risk analysis of possible impact on environmental values and assets.
- The establishment of community safe refuge facilities where people can go on days of extreme fire danger.

The fire management Plan will need to show its proposed zoning (Asset zones (A), Buffer zones (B) and Conservation zones (C)) before detailed comments can be made in regard to how best to manage fire risks in any location.

With A zones being within 100 metres of assets such as dwellings and structures, the Conservation Council considers that fuel and hazard reduction would need to be part of

coordinated community actions that include a variety of non-burning and burning actions.

The Conservation Council is deeply concerned that systemic burning within B zones up to a kilometre in width has the potential to cause enormous environmental damage in remnant native vegetation and ecosystems.

Question 4: What key values (heritage, threatened species, economic, tourism, recreation) will potentially be impacted by fire in the area?

The 20-thousand hectares of government-owned land in the South Para area of the Mount Lofty Ranges contains important remnants of native vegetation and biodiversity of the Mount Lofty Ranges which has been cleared by more than 90%. The biodiversity within the remnants require areas that are largely undisturbed to minimise the continuing species extinctions that are anticipated to be significant over the next 50 to 100 years.

Dense understorey, hollow trees, hollow logs and debris are required as habitat, nesting sites and protection for many species of birds, mammals and reptiles to survive, and to have a degree of protection from introduced foxes and cats.

Whilst prescribed burning can have benefits for biodiversity under some limited circumstances (such as when the science clearly supports that biodiversity improvements can be achieved through planned burning), the systematic widespread burning in conservation parks and reserves which removes habitat, hollow logs, trees and dense understorey has a devastating effect on biodiversity and could tip populations in this area to extinction. Systemic widespread burning can at the same time as create the perfect conditions for weed invasion which in turn can increase the risk of fire. There does not yet appear to be any clear evidence to support the notion that the risk of fire to life and property is reduced following prescribed burning within conservation parks and reserves. A far more tangible benefit in protecting communities would be targeted efforts in and around human settlements, including the removal of woody weeds.

For example, it would not be appropriate to have prescribed burning in the Warren Conservation Park that would harm the high biodiversity whilst having questionable impact on reducing fire risks to residents in the adjacent Watts Gully, where individual dwellings are placed amongst dense bushland. In such situations it is best to focus on assisting residents to take appropriate action for minimising fire risk in the areas immediately within and surrounding their properties. The fire risk to such dwellings though can remain high due to fuels and management on private lands between these dwellings, despite controlled burns on an adjacent park

The science surrounding recommended prescribed burns is focussed on how frequent burn-offs can be without damaging environmental assets. We would argue that the science could equally be focussed on how infrequent burn-offs can be without increasing the risk of fire. Research has demonstrated that more frequent burns can increase the shrub layer and result in hotter more damaging fires. The longer the interval between fires the less flammable the vegetation becomes, because the middle shrub layer reduces and the understorey ground layer of small plants takes over the forest floor.

The fire regime for eucalypt woodlands is about 80-150 years. An increase in prescribed burning of these forests could switch the flora to a more flammable environment with a greater component of grasses, woody shrubs and invasive weeds.

Question 5: What is your vision or aspiration for the future fire management of the area?

The Conservation Council would aspire to have a well informed community, aware of the fire risks, aware of how to prevent bushfires from starting and aware that what they do in and around their homes and work place can reduce their personal fire risk.

The Conservation Council would aspire to clearer and transparent planning and resourcing for fire management in the area across the entire community. Fire management must incorporate planning, education and the establishment of safe refuge areas.

People choose to live in this region because of its rural and environmental values. Living within this environment does have risks that cannot be eliminated, however there is a great deal more that can be achieved without harming the environment. The region houses the last vestiges of many ecological communities and habitats for rare and threatened flora and fauna. Some arms of government spend considerable resources in protecting these values and it is imperative that actions to reduce the risk of fire are compatible with actions to protect Biodiversity. Policies surrounding recent Government Plans and Programs including No Species Loss, The Regional Recovery Plan for the AMLR, Informing Biodiversity Conservation and NatureLinks need to be recognised by other arms of government working in the same region to ensure that the actions of one group do not counteract or undermine the efforts of other groups.

Targeted fuel reduction zones and prescribed burning for asset protection has a place, but should not be *area driven or routine* at the expense of targeted effort informed by proper risk assessment and science. All proposed burns should be in full consultation with all stakeholders or representatives for people, property and the environment.

The Conservation Council supports the need for greater research and knowledge to inform bushfire management from all perspectives; social, environmental, infrastructure etc.

Each potential prescribed burn should be clearly described as to whether the primary driver is for asset protection or to benefit biodiversity. The associated benchmark assessments of biodiversity and fuel loads are essential, and follow up assessments over progressive years is also essential to quantify the fire and biodiversity benefits or harm.

Adequate resourcing of any prescribed burns is also essential and should include:

- A biodiversity impact assessment, (including how the impact can change such as during the spring nesting season)
- Long term planning to ensure that a mosaic of habitats remain and are planned in such a way that prevents systemic harm caused by excessively frequent burning cycles particularly in B and C zones.
- Protection of long unburnt Eucalypt woodland areas
- Protection of significant trees
- Protection of significant dense habitats
- Protection of endangered and vulnerable populations and ecological communities
- Follow up weed control and other remedial actions as necessary

Question 6: Any further comments? (attach more pages if necessary)

The Conservation Council would seek to comment in more detail as the plan is developed.