Australian Speleological Federation Inc.

Incorporated in the ACT

PO Box 388 BROADWAY NSW 2007
www.caves.org.au
ABN:15 169 919 964

Promoting conservation and sustainable management of Australia's cave and karst environments

Reply to: Dr Clare Buswell, Chair, ASF Cave Conservation Commission.
Clare.buswell@flinders.edu.au

1/11/21

The Project Team,
Wild Horse Heritage Management Plan
Kosciuszko National Park
National Parks and Wildlife Service
P.O. Box 472
NSW. 2720.

Re: Draft Kosciuszko National Park Wild Horse Heritage Management Plan.

Dear Members of the Project Team,

The Australian Speleological Federation's Cave Conservation Commission welcomes the release of the Draft Kosciuszko National Park Wild Horse Heritage Management Plan, (DWHHMP).

The Australian Speleological Federation is the peak national body of speleologists with 23 member societies representing slightly more than 1,000 members. Its aims and objectives are to explore, document, conserve and educate members of the public about the caves and karst of Australia. Indeed, its members frequently document the caves and karst located in the Kosciuszko National Park. As such their expertise and services are often drawn on by managers seeking expert advice on policy concerning the caves of Yarrangobilly, Cooleman Plains and Indi.

The ASF Cave Commission is tasked with advocating for better management and protection of caves and karst on both public and private land. The Commission provides information to members and others about conservation matters and provides advice on courses of action on cave conservation issues.

As such the ASF and the Commission have established and given effect to a number of Codes of practice to provide guidance on caving practices for individuals and groups. They have been adopted by many state land management agencies and outdoor organisations. These codes are:

- ASF Minimal Impact Caving Code
- ASF Minimal Impact Code of Ethics for Scientific Investigation in Caves

The Federation's Cave Conservation Commission would like to address the following specific points:

- Impacts on the Alpine Karst of the Park
- Zoning
- Culling
- Language used in the DWHHMP
- Financial modelling
- Kosciuszko Wild Horse Heritage Act 2018,

Impacts on the Alpine Karst of the Park.

It is widely accepted that karst landscapes require an holistic management approach.[1] As such, this involves the management of catchments – waterways, fens, bogs and soils - that extend beyond the karst rock units themselves as cave environments are affected by air, water and soil movement. Importantly, karst catchments feed surface environments that support flora and fauna which is endemic to karst surfaces.

From this perspective, the ASF Cave Conservation Commission finds the proposed management of feral horses in the three karst areas of the KNP, as outlined in the draft plan, needs to be seriously rethought.

The karst areas of Indi, in the Pilot/Byadbo Wilderness area, Yarrangobilly and Cooleman Plains in the north of the KNP are the only montane or alpine karst areas in Australia. As such, both the Kosciuszko Plan of Management, (2006-21), and previous Kosciuszko Wild Horse Management Plans (2008, 2016) recognised the national and/or state significance of these landscapes:

> We can only manage karst systems by protecting the entire karst catchments. This is because karst systems are amongst the most vulnerable of ecosystems, partly because if they are damaged it takes vast amounts of time for them to be formed again. Their integrity depends upon the relationship between rock, water, soil, vegetation and air remaining essentially unchanged. Any interference with this relationship can result in their degradation.[2]

Further, the 2008 Horse Management Plan stated that:

> Karst ecosystems are at risk from the changes that come with the activities of introduced animals, including horses. These impacts include damage to vegetation and removal of vegetation which leads to erosion, and silt clogging up the karst system.[3]

Thus, to protect karst geomorphological and hydrological values, the ASF Cave Conservation Commission stresses the importance of including *all* the catchment areas of the Yarrangobilly Karst area which extends as far north to include:

- all of Brownleys Back Creek,
- all of the Yarrangobilly River,

---

[1] Spate A. & Baker A., (2018). Karst values of Kosciuszko National Park: a review of values and of recent research. Proceedings of the Linnean Society of New South Wales 140, pp. 253-264. Worboys G. & Good R., (2011). Caring for our Australian Alps Catchment Summary: Report For Policy Makers, Department of Climate Change and Energy Efficiency, Canberra.

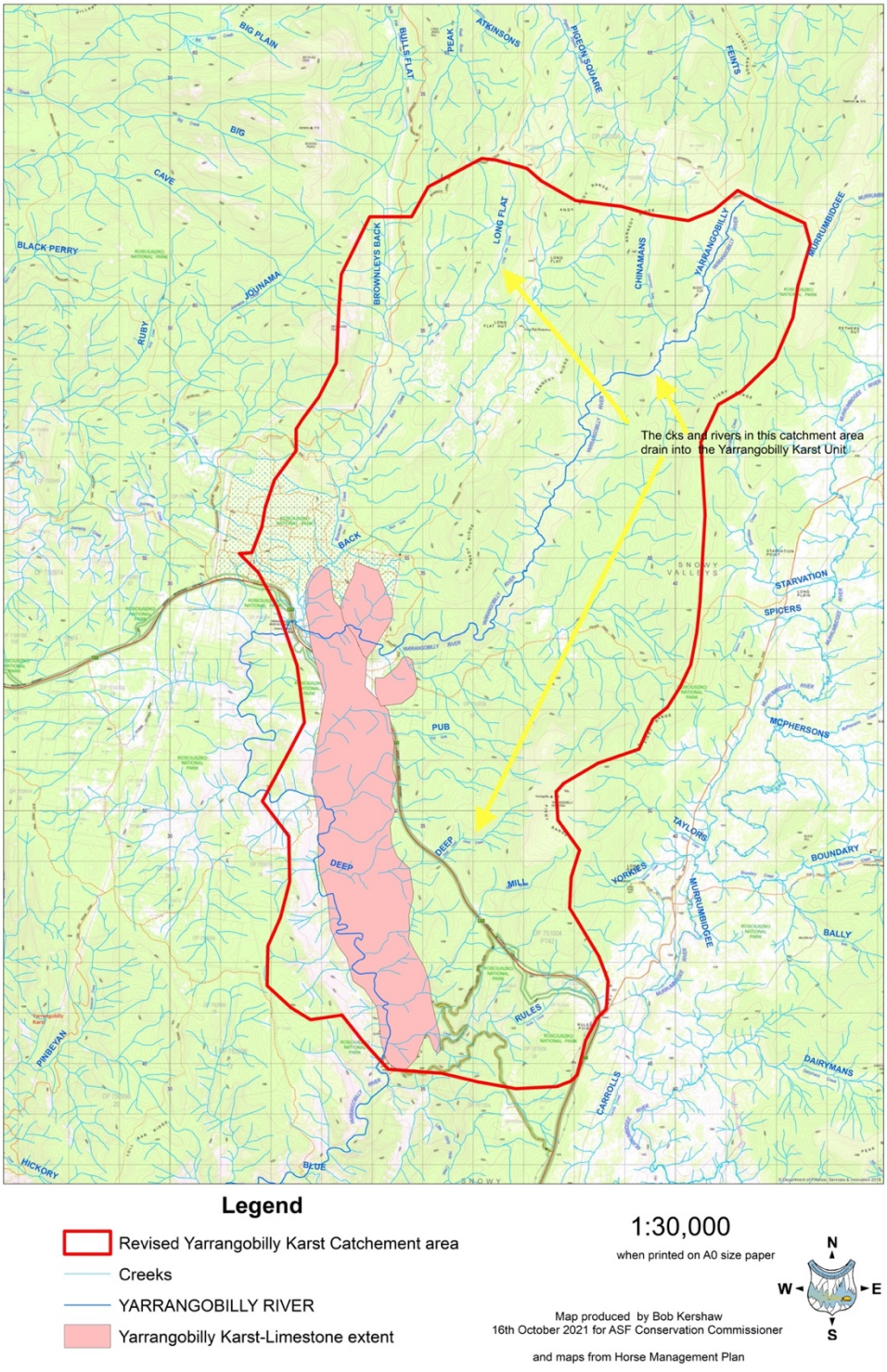
[2] Horse Management Plan for Kosciuszko National Park. 2008, p. 7.

[3] Ibid. p. 7. Kosciuszko National Park Plan of Management. (As amended, 2021). pp. 9, 159-165.

- and east to include Rules, Mill and Deep Creeks.

All of these creeks, and their feeder creeks drain into the Yarrangobilly karst unit and must be free of the impacts of feral horses: bank destruction, waterway sedimentation and soil pugging with the resultant cave inflow turbidity as the below map clearly demonstrates.

NSW NPWS Horse Management Plan Yarrangobilly Karst areas

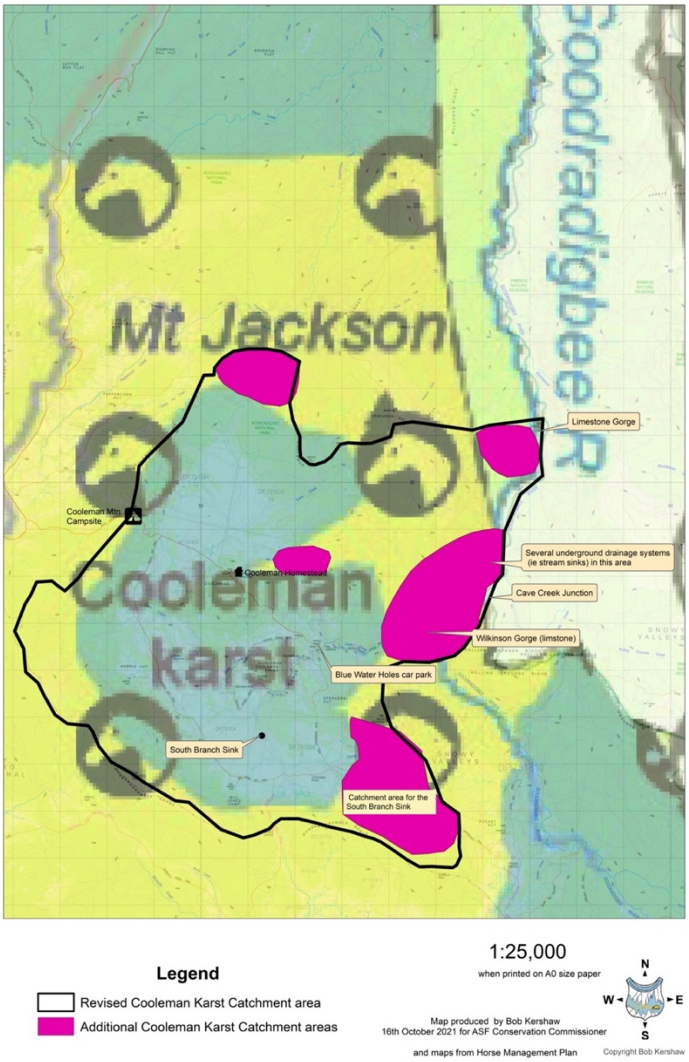


The Cooleman Plain Karst Area.

Again, the planned retention zone only includes some areas of its significant karst catchment. Whilst we applaud the plan's aim to remove these animals from the area currently designated as Cooleman Karst on the map on page 12 of the DWHHMP, the designated area is not accurate. It fails to include the full extent of catchments that drain into the limestone unit itself. Thus the area designated for removal must be expanded to include:

- North to where the Goodradigbee River meets the Grey Mare Flat, also known as Limestone Gorge.
- Then extend west over Mary's Hill, to all the catchments of Cave Creek, including those that drain from the Cooleman Mountain Campsite.
- Then going south, to include the drainage that runs into Harris Hut and Bill Jones Campsites,
- the important drainage system that has its source in the south east section of the catchment at Seventeen Flat Creek.

NSW NPWS Horse Management Plan and Cooleman Karst areas



Indi Karst Area.

This area, located on the NSW/Victorian border, is in the Pilot Wilderness Area. This Wilderness area, as is most of the KNP, is a declared UNESCO Biosphere Reserve. This important section of the park is zoned as a retention area for feral horses. This is unacceptable and again the ASF Cave Conservation Commission calls for a better management plan for both the Indi Karst, its catchment and the entire wilderness areas of the Pilot and Byadbo.

For the Indi karst catchment this means the area bounded by the Murray River and the Pilot-Cowombat Ridge Fire Trail starting at its southern end and heading north for four kilometres, then turning back down to the Murray River.

Only by including all the designated catchment areas in this submission will the waterways and stream sinks that flow onto the edge of the karst areas and feed the underground hydrology be protected from feral horse impacts. This will help reduce the fine sedimentation that has been known to block entrances to caves found on the outer edges of these karst precincts.[4]

Zoning

Whilst the plan divides the park into three zones: Retention, Elimination/Removal and Prevention zones, there are no hard borders between these areas, thus making such zoning problematic due to the nature of horse migration activities. The specified buffer zones, as outlined in the Scientific Advisory Panel Report, are not realistic. Rather, they will provide corridors of attractive, competition-free areas not only for bachelor mobs but for any herd wanting to expand their range in times of resource scarcity.[5] For the Cooleman Plains karst area this means that the herds from Long Plain and Cooinbil will simply move onto its lush riverine valleys, further destroying its rare and endangered fauna and ecosystems.

Zoning as a management strategy helps, of course, to plan and focus resources and this raises other matters.

Culling

All feral horses removed, as quickly as possible, of from all three karst areas and catchments. and that the total number of horses for the entire park must be brought back to the number stated in the 2016 plan of 600. The Commission notes that as an average of 372 horses per year were removed during 2008-2016[6] that, unless *all* methods of removal are used, including aerial shooting, the natural environment for which the park is renowned, will continue suffer damage that will be costly in the extreme and in some places irreversible to repair. The Commission strongly suggests that the KNP management team takes note of the Victorian wild horse management plans which have been successful in carrying out high rates of removal from the bordering Alpine National Park.[7]

Language

It is highly inappropriate and insulting to place Aboriginal Cultural Values under the same sub-heading as Other Environmental Values as occurs on page five of the DWHHMP.

Other Environmental Values.

---

[4] Scanes P. R., Mc Sorley A. & Dickson A., 'Feral Horses Equus caballus increase suspended sediment in subalpine streams'. *Marine and Freshwater Research.* 2021. Vol. 72, pp. 1290-1302.
[5] Final Report of the Kosciuszko Wild Horse Scientific Advisory Panel. Advice to assist in preparation of the Kosciuszko National Park 2020. Wild Horse Management Plan. Sept. 2020. pp. 52-54.
[6] Ibid. p. 34.
[7] https://engage.vic.gov.au/download_file/44636/5233

The term '*Other* Environmental Values' is used extensively throughout the draft management plan to denote the values of the fauna and flora found only in the KNP.[8] The use of the word 'other', demotes those values, placing them as secondary to that of feral horses. This is disingenuous when, in practice, it is the uniqueness of the flora and the landscapes of the KNP that visitors come to see and experience. To put it another way, you can only see *Eucalyptus pauciflora niphophila* in all its glory in the Australian alps. You can see horses in paddocks all around the country.
Thus this terminology should be replaced with either 'Environmental Values' or, as on page 6 of the plan, 'Natural Values'.

Finance

No financial modelling nor any assurance of financial transparency is provided within the DHHMP.[9] This raises concerns as to where the funding for the removal, monitoring and research programmes as outlined in the plan and the Scientific Advisory Panel report is going to come from.[10] Importantly, it raises doubts about the ability of agencies tasked with carrying out the plan to be able do so within the specified time-frames, 2022 to mid-2027.

Kosciuszko Wild Horse Heritage Act 2018,

The ASF Cave Conservation Commission recognises that KNP management has been forced, by the requirement to implement the Kosciuszko Wild Horse Heritage Act 2018, to promote the concept that these animals have heritage values with a requirement that opportunities for viewing them is available to the visiting public.[11] We find that these requirements, have severely impacted the conservation and protection of the irreplaceable and nationally significant natural values of Australia's only Alpine Karst areas and the wider Kosciuszko National Park. It is inconceivable that this Act and its implementation allows an introduced and invasive species to push already declared vulnerable species towards extinction by destroying habitats and landforms that are unique in the world. As such we call for this Act to be immediately repealed.

The ASF Cave Conservation Commission recommends that serious and immediate funding for the removal of all but a more manageable 600 horses from the KNP is forwarded by both State and Federal Governments as both have legal obligations to protect and conserve Australia's ecological bio-diversity[12].

Concluding remarks.

There exists a significant body of evidential research pointing to the destructive impacts of feral horses on waterways that form the headwater catchments of some of Australia's most important river systems, and those that also form part of nationally significant karst catchments. In order to protect these karst areas the boundaries of the proposed exclusion areas as drawn up in the DWHHMP must be extended to include all of the catchments that drain waters into fragile cave systems.

---

[8] Draft Kosciuszko National Park Wild Horse Heritage Management Plan. 2021 See page two of the executive summary, and throughout the document: pages, 5, 8, 9, 13, 14, 15, 16, 18, 26 & 30.
[9] Op Cit. There is one reference in the Scientific Advisory Report of a costing for fencing at US$6700 and $9500 per km (Moseby et al. 2006). p. 65.
[10] Ibid. Passim.
[11] Op Cit. Draft Wild Horse Heritage Plan. p. 30.
[12] For example: NSW Biodiversity Conservation Act 2016, Threatened Species Conservation Act 1995, Environment Protection and Biodiversity Conservation Act 1999.

The ASF Cave Conservation Commission for urgent removal of the feral horse populations in all areas of the KNP to reduce these impacts. This removal must utilise all methods available, including aerial shooting, to quickly bring numbers under control.

It is not appropriate that the destruction of Australia's fragile and irreplaceable Alpine karst landscapes found only in KNP, is allowed to continue due to a combination of bad public policy (the Heritage Horse Act, 2018) and inadequate management plans such as this latest draft Kosciuszko National Park Wild Horse Heritage Management Plans.

On behalf of the ASF Cave and Karst Conservation Commission I thank you for the opportunity to comment on the Draft Kosciuszko National Park Wild Horse Heritage Management Plan.

Yours Sincerely,

Dr. Clare Buswell

Chair Australian Speleological Federation's Conservation Commission Email:
Clare.buswell@flinders.edu.au

Select bibliography

Eberhard S. and Spate A. (1995). Cave invertebrate survey: towards an atlas of NSW cave fauna. NSW Heritage Assistance Program Nep 94.765. National Parks and Wildlife Service. Sydney

Kosciuszko Plan of Management (2006 and as amended in 2010, 2014 & 2021). Department of Planning Industry and Environment. Parramatta.

Protection of the Alpine National Park Draft Feral Horse Action Plan. March 2021. Parks Victoria. Melbourne. https://engage.vic.gov.au/download_file/44636/5233

Pulsford. I., Worboys. G. & Darlington. D., Revisiting Observations of Pest Horse Impacts in the Australian Alps. March 2020.

Scanes P. R., Mc Sorley A. & Dickson A., 'Feral Horses Equus caballus increase suspended sediment in subalpine streams'. *Marine and Freshwater Research.* 2021. Vol. 72, pp. 1290-1302.

Spate A. and Baker A. (2018). Karst values of Kosciuszko National Park: a review of values and of recent research. *Proceedings of the Linnean Society of New South Wales* 140, pp. 253-264.

Worboys G. & Good R., (2011). Caring for our Australian Alps Catchment Summary Report For Policy Makers. Department of Climate Change and Energy Efficiency, Canberra.