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Nature Conservation Saves for Tomorrow

The Hon Tanya Plibersek MHR
Environment Minister
PO Box 6022
House of Representatives
Parliament House
Canberra ACT 2600

Sent by email: Minister.Plibersek@dcceew.gov.au

26 August 2022

Dear Minister,

Blue Mountains Conservation Society (the Society) is a community-based volunteer organisation with around 900 members. Our mission is to help protect, conserve and advocate for the natural environment of the Greater Blue Mountains. In fulfilling its mission the Society advocates for the protection of the Greater Blue Mountains World Heritage Area (GBMWHA). The Society seeks your support for extending the world heritage status of the GBMWHA through additions and increasing the world heritage criteria. We also seek your support protecting the area from environmental impacts from overflight. This letter follows up on issue the Society raised at a meeting with you organised by the federal member for Macquarie, Ms Susan Templeman.

Increasing the National Heritage estate and extending the World Heritage status of the Greater Blue Mountains World Heritage Area (GBMWHA)

The GBMWHA, an area of over one million hectares, achieved WHA listing in 2000. The area comprises eight connected conservation areas: Wollemi, Yengo, Gardens of Stone, Blue Mountains, Kanangra-Boyd, Nattai and Thirlmere Lakes National Parks and Jenolan Karst Conservation Area. It was inscribed as World Heritage recognising two natural values criteria: biodiversity and outstanding examples of ongoing evolutionary processes.

In 2015 the GBMWHA Advisory Committee published *Values for a new generation: Greater Blue Mountains World Heritage Area* (*Values report*).[1] It considered what

[1] *Values for a new Generation* report prepared by the Greater Blue Mountains World Heritage Area Advisory Committee in 2016.
See http://www.naturetourismservices.com.au/threesisters/values-new-generation.html

else needed to be done to protect the area given it was a generation since the World Heritage Listing status for the Greater Blue Mountains was first envisaged. In that period there have been major changes in knowledge and understanding of the complex layered values of this extraordinary natural and cultural landscape. [p.9] The *Values report* contains '...data and perspectives on geodiversity, cultural and historic values, and scenic splendour, together with an explanation of boundary changes needed to provide long-term protection'. [p.9] It provides a blueprint for achieving improved protection for the GBMWHA.

Benson and Smith in Chapter 2 of the *Values report* conclude that "Increasing scientific knowledge of the natural biodiversity in and around the Greater Blue Mountains, awareness of increasing threatening processes and the potential impact of climate change, all indicate that long-term conservation effectiveness will be improved with targeted boundary changes." [p.49] They recommend including all additions to the eight constituent World Heritage reserves since 2000 and also adjacent lands containing World Heritage values. Since 2015 around 75% of the GBMWHA has been burnt in the climate-induced 2019-20 fires which impacted on an estimated 15 million mammals (excluding bats), 17 million birds and 110 million reptiles.[2] This makes it more urgent to protect the area.

1. Boundary changes

(a) **Additions to GBMWHA reserves since 2000**

The GBMWHA should be extended to include all additions to the eight constituent reserves since World Heritage status was secured in 2000. In 2015 this area of additions was over 30,000 ha. The case for this is set out in *Values report*, Chapter 2.

It is Commonwealth Government policy that any area nominated for World Heritage status must first be recognised as having National Heritage significance. National Heritage listing would bring the additional lands under the protection of *Environmental Protection and Biodiversity Conservation Act 1999 (Cth)* as Matters of National Environmental Significance. It is understood that once National Heritage listing is achieved, adding land to a World Heritage property, provided the land is less than 10% of the WHA property, can be done by a letter. **This would be a significant but relatively easy achievement to improve protection of the GBMWHA.**

(b) **Adjacent significant natural areas which would improve the GBMWHA's biodiversity.**

Values report Chapter 2 also identifies and evaluates adjacent significant natural areas whose addition to the WHA would improve the long-term conservation of the biodiversity of the GBMWHA. The authors have considered the factors of montane-related landscapes, the importance of extending ecological gradients (particularly in response to climate warming), connectivity improvement plus habitat and protection of rare and endangered communities to select and rank adjacent natural areas. They recommend for addition 23 areas which are mostly national parks or state

[2] See Peter Smith, *Impacts of the 2019-20 Fires on the GBMWHA* at https://www.bluemountains.org.au/bushfires.shtml

conservation areas. [See the List of areas attached]. They recommend that these areas should be included within the boundaries of the area for National Heritage listing and potentially for World Heritage Listing. [See the attached map of additional areas and adjacent areas plus the list of names of the additional areas]

As well, the Society would propose that Ngula Bulgarabang Regional Park should also be assessed as an additional area. This new reserve at Katoomba was created in 2018 from private land with high biodiversity values and is connected to Blue Mountains National Park through an environmental reserve.

2. Additional Values

When the Greater Blue Mountains was granted World Heritage listing in 2000 the additional criteria of indigenous and historical culture, geodiversity and aesthetic (scenic grandeur) values were not officially recognised and thus remain unprotected under Federal environmental legislation. The *Values report* addresses the case for proposing these new values be recognised in the GBMWHA listing. [Chapters 1,3-6] For instance, in relation to cultural heritage value, the report refers to more recent 'discoveries' of aboriginal rock art and the growing understanding of the importance of the GBM area and cultural landscape to contemporary Aboriginal community. One significant example of an aboriginal cultural landscape is the Burragorang Valley.

This would also require National Heritage listing first. The GBMWHA - Additional Values proposal has been listed for assessment for some years. It is on the most recent National Heritage Listings Assessments Schedule available on the internet as having to be assessed by 2015. See https://www.dcceew.gov.au/parks-heritage/heritage/places/priority-assessment

It is understood that the next step is public consultation. A final report goes to the Australian Heritage Council which advises the Minister. The Society asks that the Minister supports this process being reinvigorated and completed. In summary we believe this requires

- Supporting the inclusion of additions to the GBMWHA national parks and reserves since 2000 as having National and World Heritage status through the boundary adjustment process,
- expediting the National Heritage listing assessment of the 23 adjacent significant natural areas and Ngula Bulgarabang Regional Park and following world heritage status,
- supporting completing the National Heritage assessment process for the additional values for the GBMWHA.

Funding for GBMWHA

The GBMWHA receives little Commonwealth funding for its management which is not grant funding, compared with other State managed World Heritage areas such as Tasmanian World Heritage areas, the Wet Tropics and the Great Barrier Reef. The Society asks you to consider dedicated funding for the management of the world heritage values of the GBMWHA, particularly in the light of climate change impacts

including drought, fire and flooding from which the WHA will be recovering from for many years.

Prevention of flight paths of aircraft and scenic helicopter flights over natural areas including wilderness (in particular over World Heritage areas)

The Society is concerned about the prospect of flight paths for both commercial and tourism aircraft impacting on the Greater Blue Mountains Area, a World Heritage Site. The imminent threat is from aircraft from Western Sydney Airport and also from low flying "joy" flights or "scenic flights" emanating from the proposed heliport on Nepean Lakes or other potential bases, including Katoomba airfield.

The environmental impacts of such flights is our major concern and we can provide references from international research. As well, the GBMWHA is a large natural area which is readily accessible to the people of Greater Sydney. The mental health and well-being benefits of natural areas to people living in an increasingly urbanised world are becoming better understood and are well documented.

Flight Path Design Principles

The Society understands that Airservices Australia is primarily responsible for determining flight paths in Australia. We note that under the *Air Services Act 1995* (Cth) ('the Act'), Airservices Australia must exercise its powers and perform its functions in such a manner that ensures the environment is protected from the effects associated with the operation and use of aircraft (s 9(2)).

The Flight Path Design Principles (the 'Principles') came into effect on 1 October 2020, following a period of consultation. Blue Mountains Conservation Society had serious concerns about that consultation process, outlined in our submission to Air Services Australia. In that submission, BMCS also made submissions about the draft Principles.

The final version of the Principles includes Principle 9, which requires Airservices Australia to 'Consider Matters of National Environmental Significance, other sensitive habitats, and registered heritage sites' as one of a number of equally-weighted principles. The text accompanying that Principle, however, focuses on the application of the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) (the 'EPBC Act'). Specifically, it focusses on the requirement for an Environmental Impact Assessment for flight path changes that are *likely* to have a *significant impact* on areas such as the Greater Blue Mountains Area. The Principles state, 'Wherever practicable, we seek to avoid changes that would be *likely* to have a 'significant impact' to the environment, as defined under the *EPBC Act*'. We consider that this sets too high a threshold of risk for World Heritage Areas.

Aircraft flying over World Heritage Areas can have a number of impacts on those areas from a conservation perspective, as well as seriously impacting the enjoyment of visitors to those areas.

It is recommended that, given the environmental and cultural values inherent in a World Heritage listing, the Principles and/or relevant regulations should be strengthened to prevent aircraft flying over World Heritage Areas, and in particular the Greater Blue Mountains Area, for commercial or tourism purposes (including 'joy rides').

This could be done, for example, by amending the regulations that apply to Airservices Australia's functions to specify that:

> *Consent shall not be granted to flight paths proposed over listed World Heritage Areas unless the consent authority:*
>
> 1. *has considered the impact of the proposal on the World Heritage values and visitor experience, and*
> 2. *is satisfied that the proposal will have no adverse impacts on the World Heritage values or visitor experience*
> 3. *is satisfied that there is no feasible alternative to the proposed flight path.*

We note that under the *Airspace Regulations 2007* (Cth), the Civil Aviation Safety Authority (CASA) has the power to make a declaration designating an area to be a 'restricted area' for reasons including the protection of the environment (r 6.3).

It is also recommended that the Principles (and/or applicable regulations) should be strengthened to make it clear that Airservices Australia is required to consider the environmental impacts of any decision regarding flight paths or location of airfields on any Matters of National Environmental Significance, and to take positive steps to avoid (or mitigate) those impacts.

The Society can provide more information if required on any of the above issues. We look forward to hearing about how these issues can be progressed.

Yours sincerely,

Madi Maclean
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CONSIDERING BOUNDARY CHANGES AND ADDITIONAL AREAS FOR INCLUSION IN NATIONAL HERITAGE LISTING FOR THE GREATER BLUE MOUNTAINS WORLD HERITAGE AREA

The factors discussed above, a focus on montane-related landscapes, the importance of extending ecological gradients, connectivity improvement, and habitat and protection of rare and endangered species and communities, have been considered in relation to natural areas adjacent or close to the boundaries of the Greater Blue Mountains WHA.

In this context we have listed a number of areas that would improve the long term conservation of the biodiversity and should be included within the boundaries of the area for National Heritage Listing, and potentially for World Heritage Listing (Table 1). The selections have been made only on biodiversity issues; most of the areas also have geodiversity, scenic and cultural heritage values that should be considered as well, for example Wombeyan Caves has international geodiversity significance.

Of the areas, 19 are considered to have high importance, providing substantial enhancement for biodiversity protection; a further four to have medium importance. Most of the large areas are currently National Park or State Conservation Area tenure. High and Medium importance areas are listed in north to south order, along with their major values in Table 1.

A number of other areas were considered, but not recommended for inclusion, as not providing substantial additional value to Greater Blue mountains WHA; they do have biodiversity value in other contexts (such as Dharug NP as a significant coastal sandstone area) (see also Table 1).

Table 1: High and Medium importance areas proposed to be included with the Greater Blue Mountains WHA for National Heritage Listing, and nearby areas not recommended for inclusion

AREAS WITH HIGH IMPORTANCE

North-South order	Summary of major biodiversity values
Goulburn River National Park and adjacent National Trust listing	Large sandstone landscape area NP (73258 ha) with significant gradient extension and connectivity. Mainly sandstone with some basalt residuals, elevation from 150-600 m, 500-600 mm rainfall. Threatened plant species and very high number of significant fauna.
Nullo Mountain State Forest and Flora Reserve	Basalt flow country and lowland sandstone forest (5370 ha) with an altitudinal range 780 to 1130 m; provides an important extended climatic gradient extension and connectivity with Wollemi NP. Includes large population of the Vulnerable Derwentia blakelyi. Nullo Mountain Flora Reserve protects an unusually large-fruited form of *Eucalyptus laevopinea*.
Coricudgy State Forest	Important disjunct high elevation (1254 m)/ high rainfall basalt cap (7582 ha) with eucalypt forest with *Eucalyptus laevopinea*, *Eucalyptus bicostata*, and *Eucalyptus cypellocarpa*. Coachwood/ Sassafras rainforest.
Putty State Forest	Putty SF (22252 ha) makes up a large part of the "Putty Hole" a large area between Wollemi and Yengo NPs, most significant inholding in GBMWHA with significant biodiversity, upper catchment of Macdonald River. High number of significant fauna.
Capertee National Park	Gradient extension with Dry Capertee valley woodland, limited connectivity (2839 ha). Threatened plant species (eg *Grevillea obtusiflora* subsp *fecunda*) and high number of significant fauna.

Mugii Murum-ban State Conservation Area	Large dry sandstone area (3650 ha) with connectivity to adjacent to Gardens of Stone NP dry gradient habitats. Threatened plant species and communities; high geodiversity value in pagoda landscapes.
Finchley Aboriginal Area	Important Aboriginal Area but its small size of 4 ha contributes little specific additional biodiversity value.
Gospers Mtn inholding	Significant inholding (74 ha) in centre of, and with high connectivity on all sides, to Wollemi NP.
Newnes, Wolgan and Ben Bullen State Forests (part GOSII)	These three State Forests (Newnes 24794 ha, Wolgan 1205 ha, Ben Bullen 8252 ha) are all contiguously located on the Newnes Plateau and include very important areas of high level sandstone plateau with many restricted plant species and endangered plant communities not in currently represented in GBMWHA. They have exceptional geodiversity value as a key part of platy pagoda heartland; makes up a substantal part of the Gardens of Stone II conservation proposal.
Parr State Conservation Area	Sandstone plateau (38121 ha) wedged between Yengo and Wollemi providing very important connectivity value. Elevations down to sea level include gradient with estuarine vegetation. High number of significant fauna.
Burragorang State Cons. Area	Large sandstone landscape area (17720 ha) with significant connectivity.
Nattai State Conservation Area	Good sandstone landscape area (3383 ha) with significant connectivity.
Yerranderie State Conservation Area	Large public inholding (12192 ha) with important connectivity and biodiversity and cultural values.
Bargo State Conservation Area	Large sandstone landscape area (4619 ha) with significant connectivity and biodiversity values.
Jellore State Forest	Small area (1409 ha) on current fringe contiguous with Nattai NP and Bargo SCA. . Important connectivity with Wingecarribee River.
Wombeyan Karst Conservation Reserve	Small area (569 ha) on current fringe with significant geodiversity and cultural values. Endemic species shrub *Acacia chalkeri* and limestone mosses, significant cave fauna.
Mares Forest National Park	Small area (2599 ha) adjoining Blue Mountains NP and Wombeyan Caves KCR. Dry gradients, Guineacor Creek drains to Wollondilly River.
Joadja Nature Reserve	Small area (830 ha) on fringe of GBMWHA with significant cultural and geodiversity values but little specific additional biodiversity values.
Wollondilly River Nature Reserve	Small area (971 ha) on Wollondilly River with connectivity and endangered ecological communities. Low rainfall gradient extension.
AREAS WITH MEDIUM IMPORTANCE (NORTH TO SOUTH ORDER)	
Putty Hole freehold land	Partly forested, partly cleared, less important than adjacent Putty SF.
Hassans Walls	Isolated high altitude sandstone plateau (245 ha) immediately south of Lithgow with heath and woodland and forest. Rich flora including many orchid species and rare species (e.g.Leptospermum blakelyi). No direct natural land connectivity with GBMWHA.
Yerranderie Regional Park	Partly forested, partly cleared area (470 ha), less important than Yerranderie SCA
Bargo River State Conservation Area	Good sandstone landscape area (1970 ha) with significant connectivity and Biodiversity values
NEARBY AREAS CONSIDERED BUT NOT RECOMMENDED	
Dharug National Park	Main geographical focus and connectivity is with coastal parks from Marramarra and Popran through Muogamarra to Ku-ring-gai and Brisbane Water NPs on coast.
Gulguer Nature Reserve	Small sandstone "landscape island" Nature Reserve on Nepean River with good biodiversity values but probably best considered as part of western Sydney landscape.
Upper Nepean State Conservation Area	Limited but important connectivity, but part of coastal parks landscapes and not essentially part of the montane-focused GBMWHA.

Below: Map of Greater Blue Mountains WHA as listed in 2000 together with areas added and National Park and State Forest proposed for addition.

Attachment 3

Flight paths - Impacts on Fauna

One potential form of disturbance to birds and other animals would be the introduction and sustained use of aircraft in previously relatively unaffected bushland. Research world-wide has produced a common set of impacts by aircraft on wildlife (1)(2)(3)(4)(5)(6)(7)

I. Physical contact with birds and bats in the air, and animals on runways, usually results in immediate death or severe untreated injuries.

II. A combination of loud noise and sudden rapid movement of aircraft causes the greatest negative effects on wildlife with helicopters having a greater impact than fixed wing planes. Sudden, noisy intermittent helicopter intrusions would constitute bursts of alarm-filled harassment.

III. Helicopters are particularly associated with lethal rotor downwash and brownouts: high velocity wind vortices are generated by helicopter blades when the machine is hovering above a runway or bushland. This generates smothering blankets of airborne dust particles, reduces habitat values and exposes vegetation and wildlife to lethal wind velocities.

IV. Impacts of noise, sudden rapid movement and rotor downwash include:

- Direct physical damage such as to hearing or being shredded by rotor downwash
- Triggering of the animals 'fight or flight' response – this is characterised by a number of physiological changes brought on by the release of stress hormones into the blood stream. The animal's metabolism, heart rate and respiration rate all increase, blood flow is diverted away from the digestive system and skin to the muscles, brain and heart, while blood temperature and blood sugar levels also increase.

  Repeated exposure to noise and the constant triggering of the 'fight or flight' response can lead to chronic stress. The health of affected animals may be compromised by suppressing immune function, making them more susceptible to infection and parasites, altering growth, and by slowing recovery from food shortages.
- Individual mammal responses range from the mild (including normal signs of noise detection such as ear twitching or increased vigilance), through to a range of increasingly intense reactions. Animals may alter their activity by walking slowly away, freezing, crouching, making an intention to run, engaging in mild aggression, or increasing flocking or herding behaviour. The most intense responses are associated with more extreme behaviours, such as panicking, urinating or defecating, and running blindly at high speed.

  Birds show a similar range of responses to mammals from being alert at the mildest level, to showing an intention to fly, pecking at each other, broken-wing displays (to act as a distraction to protect nestlings) and walking, swimming or flying short distances.
- Changes in the acoustic environment may impact severely on birds, frogs and other animals that rely on their hearing to receive information about their surroundings, or who use vocalisations to

coordinate a range of activities including feeding, mating and courtship. Bats that use echolocation for navigation are particularly vulnerable to acoustic environment changes, as are social animals that rely on vocal communication for the cohesiveness of their group. Consider the impact of helicopter noise on lyrebird calls and mating behaviour in the Jamison Valley and Grose Valleys, and disruption to the sophisticated community calls of Superb Fairy-wrens warning of danger.

Behavioural and physiological responses as outlined above may result in a decline in individual numbers through collisions with aircraft and the rapid flushing of alarmed birds from nests (impacting on reproduction rates), feeding areas or cliff edges. Short-term avoidance of sections of habitat may become long-term habitat displacements which results in competition for resources including food, roosting branches and nesting hollows elsewhere, and an eventual loss of individuals and even species.

References

BMRM Ecological Surveys 2019, Bird surveys in the vicinity of Katoomba Airfield 2019, unpublished report (1)

Cart, J. 2000, 'Environment: New Rules are designed to curb noise at the popular site. They include increasing 'no-fly' zone to 75% of the national park', *New York Times*, March 29 (2)

Harbrow, M.A., Cessford, G.R. and Kazmierow, B.J. (eds) 2011, *The impact of noise on recreationists and wildlife in New Zealand's natural areas*, Science for Conservation 314, NZ Department of Conservation https://www.doc.govt.nz/documents/science-and-technical/sfc314entire.pdf (3)

JJ Ryan Consulting Pty Ltd [n.d] *Helicopter Rotor Downwash – Excessive wind, FOD and brownouts, what are the risks?* https://jjryan.com.au/index.php/helicopter-rotor-downwash-excessive-wind-fod-and-brownouts-what-are-the-risks/ (4)

National Park Service U.S. Department of the Interior 2011, *Special Flight Rules Area in the Vicinity of Grand Canyon National Park Actions to Substantially Restore Natural Quiet*, Draft Environmental Impact Statement, DES 10-60, Volume 1: https://www.nps.gov/grca/learn/management/upload/gcnp_deis_cover_through_chapter_3.pdf (5)

Probets, C. 2006, Information on honeyeater bird migration (http://www.bmbirding.com.au/hemig.html) (6)

Van der Grift, E.A. and de Molenaar, H., 2008, *Effects of low-flying aircraft on wildlife Appendix: Literature Review*, Alterra-Rapport 1725 Appendix-CD, Alterra, Wageningen, The Netherlands http://edepot.wur.nl/120972 (7)