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Nature Conservation Saves for Tomorrow

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16 November 2022

Sent by email: heritage@environment.gov.au

Submission on the Australian Heritage Council's Preliminary Assessment of additional areas and values for Greater Blue Mountains area

The Blue Mountains Conservation Society (the Society) is a community-based volunteer organisation with over 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.

The Society is pleased that the Australian Heritage Council (AHC) has opened public consultation for the assessment of nationally significant values and areas for addition to the Greater Blue Mountains Area National Heritage listed site.

The Society supports the AHC's preliminary assessment of biodiversity, aesthetics, geological heritage, Indigenous heritage and historic heritage in the Greater Blue Mountains Area as described and mapped by the Federal Department of Climate Change, Energy, the Environment and Water.¹ The Society also supports the detailed information and reasoning for additional values and areas for the Greater Blue Mountains in the 2015 *Values for a new generation* report compiled by the Greater Blue Mountains World Heritage Advisory Committee (GBMWhA AC).² We recommend the inclusion of high value conservation areas adjacent to the Greater Blue Mountains Area (GMBA). As well we support the inscription of over 40,000 hectares of reserve additions to the eight protected areas already inscribed on the World Heritage and National Heritage lists, as this can be done through a simple administrative process.

¹ The AHC assessment refers to Bargo State Conservation Area (SCA), Gardens of Stone SCA, Burragarang SCA, Capertee National Park, Coricudgy State Forest, Finchley Aboriginal Area, Goulburn River National Park and The Drip and Corner Gorge (The Drip and Corner Gorge now in Goulburn River State Conservation Area), Hassans Walls, Mugil Murum-ban SCA, Nattai SCA, Nullo Mountain State Forest and Flora Reserve, Parr SCA (including Comleroy State Forest), Wombeyan Karst Conservation Reserve, Yerranderie SCA, Comleroy Flora Reserve.

² Benson, D. et al, 2015, *Values for a new generation - Greater Blue Mountains World Heritage Area*, Greater Blue Mountains World Heritage Area Advisory Committee, 2015 Available at: <https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/types-of-protected-areas/world-heritage-listed-areas/greater-blue-mountains>.

New discoveries have brought increased awareness of the rich biodiversity of the GBMA. The existing world heritage area is 90 per cent in the Sydney Basin bioregion. Additions from the wider area, as are proposed, would include more adjacent areas and therefore more species. Research has also highlighted the fragility of the area, especially at its margins. Since 2000 conservationists, ecologists, geologists and Aboriginal people have presented data and information on other values and adjacent high conservation natural areas that should be listed. The Society recommends that these additional values and areas of high conservation value are now considered for National Heritage Listing.

Together these recommended additional areas and values will strengthen protection of the existing national heritage area and add more threatened species to reserves managed for conservation values. The Greater Blue Mountains World Heritage Area (GBMWA) is over one million hectares and contains a large portion of wilderness. The AHC's preliminary assessment would add around 249,000 hectares, the Society's recommended areas would add 45,000 hectares and the boundary adjustments a further 41,000 hectares. The GBMWA is already a large protected natural area with many threatened species and ecological communities, which were seriously impacted by the 2019-202 climate-induced megafire. These additions would increase the likelihood of threatened species surviving future such impacts as they would increase connectivity, extend ecological gradient, habitat and ecological protection of rare species, provide refugia and assist climate change impacts already evident.

The Society supports the submissions to the AHC from Wilderness Australia; Wilderness Society; Ecological Society and ecologists, Judy and Peter Smith.

1. Additional values

The Society recognises that during the years since the Greater Blue Mountains was included on the National Heritage List (2007) there has been a growing understanding of the importance of the geodiversity of the area. Advances in technology have supported a greater understanding, recognition and appreciation of the natural and cultural landscapes on a global scale. We therefore support the additional values of *Geomorphology*, *Aesthetic* and *Cultural Heritage* being added for National Heritage listing consideration and assessed across the whole expanded area.³

In 2000, the Greater Blue Mountains Area was included on the World Heritage list for its outstanding universal natural vegetation and exceptional biodiversity values. The Society notes that cultural (Indigenous and historic) and scenic values were also nominated by the NSW and Australian Governments, but given the nomination was prepared in just six weeks, time defeated the effective justification of these important values. Also, at that time the World Heritage Committee was unready to consider cultural landscapes.

(i) *Geomorphology*

The geomorphology is defined in the Australian Natural Heritage Charter⁴ as the range of Earth features including geological, geomorphological, palaeontological, soil, hydrological and atmospheric features, systems and earth processes.

³ Benson, D. et al, 2015, *Values for a new generation - Greater Blue Mountains World Heritage Area*, Greater Blue Mountains World Heritage Area Advisory Committee.

⁴ Cairnes, L., 1997, *Australian Natural Heritage Charter: Standards for the Conservation of Places of natural Heritage Significance*, Australian Committee of IUCN, Sydney.

The Greater Blue Mountains World Heritage Area (GBMWA) and associated complementary areas have geodiversity and geoheritage significance, that should now be recognised for both National and International Heritage listing.

The geoheritage of the GBMA meets the following National Heritage criteria:

- importance in the course, or pattern, of Australia's natural or cultural history
- possession of uncommon, rare or endangered aspects of Australia's natural or cultural history
- potential to yield information that will contribute to an understanding of Australia's natural or cultural history
- demonstrating the principal characteristics of...a class of Australia's natural or cultural environments.

There are numerous geological and geomorphological features within the GBMWA such as the cliff line systems, scenic lookout features such as The Three Sisters, the pagodas and slot canyons that have national, and potentially international significance, associated with their aesthetic, scenic and interpretation qualities, with these extending to the margins and adjacent lands too.⁵

In relation to these criteria, the GBMA exhibits the following values.

1. Excellent evidence of the tectonic cycle of the Lachlan Orogen, the formation of the Sydney Basin, the uplift of the Great Dividing Range (during the rifting of the Tasman Sea), subsequent dynamic topography and neotectonic activity.
2. In the GBMA these features are combined in one region, whereas they may be exhibited singly elsewhere.
3. Being in a largely natural state, the GBMA powerfully represents the relationship between biodiversity and the complex story of the underlying rocks, soil and landscape.
4. The deep valleys of the GBMA exhibit the full rock sequence of Lachlan Orogen basement capped by Permian and Triassic sediments. This sequence and the history of uplift is expressed in the form of the valleys, including broad and/or V-shaped profiles, extensive cliff lines, nested valleys, bottleneck gorges and knickzones.
5. Extensive expression of geomorphological features resulting from strong rectilinear jointing in the sandstones forming the plateau cap, including slot canyons and vertical cliffs.
6. Extensive sandstone 'pagoda' landscapes, also partly a consequence of jointing as well as the concentration of ironstone forms within the sandstone.
7. Inclusion of large parts of the Lapstone Structural Complex (LSC), a major geological and landscape feature on the eastern margins of the area. This forms the eastern Blue Mountains escarpment as viewed from Sydney. The LSC includes perched river gravels and disrupted drainage features such as lakes (eg. Thirlmere Lakes), swamps, wind gaps and antecedent valleys.
8. Major limestone karst landscapes, especially at Jenolan and Wombeyan but also a number of other locations. Some examples of sandstone karst are also present.

⁵ Benson, D. et al, 2015, *Values for a new generation - Greater Blue Mountains World Heritage Area*, Greater Blue Mountains World Heritage Area Advisory Committee, Chapter 1.

(ii) *Aesthetics*

The aesthetics of the Blue Mountains, with its significant visual 'blue haze' partly from the droplets of eucalyptus oil in the atmosphere, has been recognised since humans first arrived in the region (ref pp157 Values book).

Another prominent atmospheric quality of the region, especially the main tourism region centred on Katoomba, is the occurrence of frequent mists and changing weather. This is mainly due to the proximity of the coast, a moist maritime climate and the orographic effect caused by the uplift of the mountains both regionally and locally in the form of cliffed valley escarpments. The location of so many lookouts and walking tracks on the rim of dramatic cliffs above forested valleys means that the swirling mists are readily accessible.

Because of the scenic grandeur of the area, now the bedrock of the tourism industry, the Greater Blue Mountains has been recognised by the Commonwealth as a 'National Landscape' – these are '*places that capture the essence of our country – our most inspirational environments offering world class natural and cultural experiences*'.⁶

The dramatic landscape of the Greater Blue Mountains has inspired many artists, photographers, authors, film-makers, writers, musicians and poets. From the early European years these include poets Henry Lawson and Henry Kendall, writers Charles Darwin and Louisa Ann Meredith, artists Joseph Lycett, Conrad Martens and William Piguenit, and photographers Robert Hunt and Joseph Bischoff. In 1875 early conservationist Eccleston du Faur organised an artists' camp in the Grose Valley (now within Blue Mountains National Park). These pioneers were followed by many more such as photographers Harry Phillips and Frank Hurley, and artists Margaret Preston, Norman Lyndsay and Brett Whiteley. More recent creators with a focus on the Blue Mountains include Mark Tredinnick (writer), John Weiley (filmmaker) and Nigel Westlake (composer).

The outstanding natural beauty and very high aesthetic values of the GBMA have been powerfully depicted by visual artists in particular. Contemporary proponents include photographers Henry Gold and Ian Brown and painters. Their works have been widely exhibited and published in numerous books and calendars. In 2021 the Recovery arts project was organised by the Blue Mountains World Heritage Institute to celebrate connections between the arts and citizen science after bushfires of Black Summer. The contributions of the artists can be seen here: <https://ecoart.space/recovery>

The City of Blue Mountains was the first NSW City of the Arts, and is known for its large and diverse arts community, supported by several organisations:

- Blackheath Art Society - <https://blackheathart.com/>
- Blue Mountains Creative Arts Network - <https://bmcan.com.au/>
- Blue Mountains Cultural Centre – www.bluemountainculturalcentre.com.au
- Society of Mountain Artists - <https://www.mountainartists.org/>

The landscape and biodiversity of the Blue Mountains are frequent subjects and inspirations for numerous local and visiting artists.^{7,8}

⁶ Australian Government, 2021, *National Landscapes*, Department of Climate Change, Energy, the Environment and Water, viewed 16 November 2022, www.dcceew.gov.au/parks-heritage/national-parks/national-landscapes-0.

⁷ Benson, D. et al, 2015, *Values for a new generation - Greater Blue Mountains World Heritage Area*, Greater Blue Mountains World Heritage Area Advisory Committee, Ch. 6.

⁸ Speirs, H., 1981, *Landscape Art and The Blue Mountains*, Alternative Publishing Co-operative, Sydney

Inspirational landscapes are places that inspire emotional, spiritual and/or intellectual responses because of their meanings, associations, stories, aesthetics and history (Context, 2003, Crocker and Davies, 2005a). The GBMA is such a place. Aesthetic value, or natural beauty, should therefore be a major component of how we now view values, and should be added as such for National Heritage listing.⁹

(iii) Cultural Heritage (Historic and Indigenous)

Nature and culture interaction refers to the relationship between people and nature (such as biodiversity, or scenery) and the cultural responses and values that result. While these values are directly related to other values (i.e. geodiversity, aesthetics, history, Aboriginal culture) they represent separate values under National Heritage Criteria and arise from the response of people to place¹⁰.

The Greater Blue Mountains is a place where natural and cultural values interact, it is therefore important to recognise Cultural Heritage as being important to contemporary Australian culture and add to the National Heritage listing.

As such, the Society recommends that the cultural history criteria should apply to the existing GBMWA, and the additional areas supported in this submission.

The historic cultural heritage of the GBMA meets the following National Heritage criteria:

- importance in the course, or pattern, of Australia's natural or cultural history
- possession of uncommon, rare or endangered aspects of Australia's natural or cultural history
- potential to yield information that will contribute to an understanding of Australia's natural or cultural history
- demonstrating the principal characteristics of...a class of Australia's natural or cultural environments;

They meet these criteria for the following reasons. GBMA natural heritage listed area is of outstanding cultural value to the nation because its existence came from a wider cultural movement in western countries developing in second half of nineteenth century to recognise and preserve natural beauty and protect it from modern industrial society. In Australia this movement resulted in an extensive system of connected parks in the Sydney basin as set out in the Australian government's World Heritage nomination for the Greater Blue Mountains.¹¹ GBMA has more recently been recognised as World Heritage.

One unique feature was the proximity of these parks to a large and growing urban area. The World Heritage proposal for the GBMA said that "in second half of 19th century a symbiotic relationship developed between the citizens of Sydney and the nearby Blue Mountains bushlands which persists to this day (1998) in a living protective community association"¹²

This movement was of outstanding heritage value to the nation for being driven by the community, "both the continuity and evolution of voluntary effort were remarkable."

"The GBMA nomination sets out the four phases of that community effort:

⁹ Benson, D. et al, 2015, *Values for a new generation - Greater Blue Mountains World Heritage Area*, Greater Blue Mountains World Heritage Area Advisory Committee, Ch. 6, pp. 156

¹⁰ Benson, D. et al, 2015, *Values for a new generation - Greater Blue Mountains World Heritage Area*, Greater Blue Mountains World Heritage Area Advisory Committee, Ch. 5.

¹¹ Government of Australia, 1998, *The Greater Blue Mountains Area World Heritage Nomination*, for inscription on the World Heritage List, NSW National Parks and Wildlife Service, pp. 51

¹² GBMA WH Nomination, p.51.

- health based movement from 1870s which resulted in the first parks and the track systems (many of which are still used today);
- bushwalker conservation movement of 1930s, which led to 'large visionary parks and the wilderness reserves';
- the conservation revival of the 1960s 'which created mass public support for the implementation of the earlier larger park proposals and wilderness systems' and
- 1990s movement to consolidate and confirm the environmental values including recognition of WH values."

During all stages community local and state authorities played important complementary roles"¹³

The extent and accomplishments of the community effort is of outstanding value to the nation. The GBMA nomination states that "critical (to the outcomes) was the interaction between recreationists and the natural beauty of the forest covered plateaus." This natural area was 'absorbed into the community psyche, such experiences and images have been the life force of conservation and the reason for the continuing natural state of so much of the country."¹⁴

This has continued. "The recreational association with places now primarily seen as conservation areas is a close one today. Many of the walking tracks built in the 19th century, extending over 90 km in the Grose and Jamison valleys alone, are still in use and bushwalkers continue to enjoy the remote trackless wilderness areas." The walking track system today, much of which is recognised at state heritage level, should also be recognised as of outstanding cultural value to the nation. As well, many of today's conservation organisations can trace their origins and objectives to this movement and the creation of the GBM area reserve.

The Society also recognises that Indigenous cultural values need to be incorporated but that engagement by the AHC with Traditional Custodians is necessary to determine these.

¹³ GBMA WH Nomination, p.52

¹⁴ GBMA WH Nomination, p.54

2.1 Additional Areas in AHC Preliminary Assessment

The Society supports all additional areas that the AHC is considering for inclusion in the National Heritage List. Nearly all of these areas were recommended for addition to the World Heritage Area by the GBMWAH AC mostly for their significant connectivity, climatic gradient extensions, biodiversity and geodiversity values.

AHC LISTED PROPOSED AREAS

AHC Proposed Areas	Values	Hectares
Additions to national parks in the GBMWAH property since 2000		41,228
Bargo State Conservation Area	Large sandstone landscape area with connectivity and biodiversity values. ¹⁵	4,619
Burratorang State Conservation Area	Large sandstone landscape area with connectivity to Nattai National Park Endangered ecological communities.	17,720
Capertee National Park	Climatic gradient extension with Dry Capertee valley woodland. Threatened plant species (eg <i>Grevillea obtusiflora subsp fecunda</i>) and a high number of significant fauna. ¹⁶	6,797
Comleroy State Forest (Flora Reserve)	Shares boundary with Parr State Conservation Area and lies across the Colo River from Wollemi National Park. Wilderness in sandstone landscape of Sydney Basin, high in biodiversity. Links wildlife corridors running east-west and north-south. Features variety of habitat and diverse native animals – home to 14 threatened animals. Habitat favoured by koalas and links to areas known for koalas. The sandstone plateau's bare rocky areas are also rich in reptile species.	2,531
Coricudgy State Forest	Important disjunct, highest elevation in northern Blue Mountains (1254 m) / high rainfall basalt cap with eucalypt forest with <i>Eucalyptus laevopinea</i> , <i>Eucalyptus bicostata</i> , and <i>Eucalyptus cypellocarpa</i> . Coachwood / Sassafras rainforest.	7,582

¹⁵ Benson, D. et al, 2015, *Values for a new generation - Greater Blue Mountains World Heritage Area*, Greater Blue Mountains World Heritage Area Advisory Committee.

¹⁶ NSW Government, 2022, *Capertee National Park Draft, Plan of Management*, NSW Department of Planning and Environment, viewed 16 November 2022, <https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-management/community-engagement/capertee-national-park-draft-plan-of-management>

<p>Crown lands between Medlow Bath and Hassans Walls, including: Dargan Creek Reserve; Mount Clarence Reserve; Zig Zag Reserve; Crown Land at Clarence incorporating Brown's Swamp Hassans Walls Reserve Mount York Reserve; and Hyde Park Reserve.</p>	<p>High altitude refuge with unique geodiversity, wide range of Aboriginal and European Heritage sites, providing connecting corridor through high agricultural area from eastern to approaching west Contains unique flora diversity, many threatened species, eg. <i>Persoonia hindii</i>, <i>Acacia meiantha</i> <i>Acacia bynoena</i>, <i>Persoonia acerosa</i>, <i>Veronica blakelyi</i> and <i>Dilwynia stipulifera</i> which are not currently protected in any National Park or the WHA.</p> <p>Hyde Park reserve contains endangered <i>Asterolasia buxifolia</i> which is not protected in any NSW National Park or WHA.</p> <ul style="list-style-type: none"> • Historic heritage – Mount York historic roads.¹⁷ 	<p>3,755</p>
<p>Finchley Aboriginal Area</p>	<p>Important Aboriginal Area first protected in 1929. Gazetted as AA in 2008. Large area of engravings on rock platform; open to public.¹⁸</p>	<p>4</p>
<p>Gardens of Stone State Conservation Area</p>	<p>Western Blue Mountains - Newnes Plateau and western escarpment, adjoining GBMWHA. Significant values including:</p> <ul style="list-style-type: none"> • Geodiversity: pagoda landscapes, montane sand dunes, peat swamps. Platy pagodas and slot canyons potentially global significance • Biodiversity – rare/threatened plants (42 species), threatened fauna (42 species), swamps/wetlands/other EECs/other rare communities (15 communities). • Landscape – integration of geodiversity and biodiversity values in a landscape that is probably rare or unique nationally. • Aboriginal heritage¹⁹ 	<p>28,322</p>
<p>Goulburn River NP</p>	<p>Large sandstone landscape area NP with gradient extension and connectivity. Mainly sandstone with some basalt residuals, elevation from 150-600m, 500-600mm rainfall. Threatened plant species and significant number of fauna.</p>	<p>73,258</p>

¹⁷ Brown, I., 2016, *Gardens of Stone Reserve Proposal, Towards National Heritage*. Colong Foundation and Blue Mountains Conservation Society.

¹⁸ NSW Government, 2009, *Yengo National Park, Parr State Conservation Area and Finchley Aboriginal Area Plan of Management*, NSW Office of Environment and Heritage, viewed 16 November 2022, <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/yengo-national-park-parr-sca-finchley-aboriginal-area-plan-of-management-090141.pdf>

¹⁹ Brown, I., 2016, *Gardens of Stone Reserve Proposal, Towards National Heritage*. Colong Foundation and Blue Mountains Conservation Society.

Hassans Walls Crown Reserve	High altitude sandstone plateau immediately south of Lithgow with heath and woodland and forest. Flora includes many orchid species and rare species (e.g. <i>Leptospermum blakelyi</i>) and rare orchid <i>Caladenia fitzgeraldii</i> . Lies in western boundary of Sydney bioregion and Central tablelands so some plants at extremity of their range. ²⁰	245
Mugii Murum-ban State Conservation Area	Large dry sandstone area with connectivity to adjacent to Gardens of Stone NP dry gradient habitats. Threatened plant species and communities; geodiversity value in pagoda landscapes. ²¹	3,650
Nattai State Conservation Area	Sandstone landscape area (with significant connectivity).	3,383
Nullo Mountain State Forest and Flora Reserve	Basalt flow country and sandstone forest with an altitudinal range 780 to 1130m; provides an important extended climatic gradient extension and connectivity with Wollemi NP. Includes large population of the Vulnerable <i>Derwentia blakelyi</i> . Nullo Mountain Flora Reserve protects an unusually large-fruited form of <i>Eucalyptus laevopinea</i> .	5,370
Parr State Conservation Area	Sandstone plateau wedged between Yengo and Wollemi providing connectivity. Elevations down to sea level include gradient with estuarine vegetation. Number of significant fauna.	38,121
Wombeyan Karst Conservation Reserve	Small area on current fringe with geodiversity and cultural values. Endemic species shrub <i>Acacia chalkeri</i> and limestone mosses and cave fauna.	569
Yerranderie State Conservation Area	Large public inholding with connectivity and biodiversity and cultural values.	12,192
	Subtotal:	249,346 ha.

²⁰ See also Native plants. Hassans Walls Reserve Lithgow, Lollback, Drewe, Coveney and Durie, 2014.

²¹ NSW Government, 2015, *Mugii Murum-ban State Conservation Area Draft Plan of Management*, NSW Office of Environment and Heritage, viewed 16 November 2022, <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/mugii-murum-ban-state-conservation-area-draft-plan-of-management-150508.pdf>

2.2 The Society’s recommended additional areas

The Society recommends for national heritage assessment the following adjacent high conservation forest areas listed in the following table. In 2015 the GBMWAH Advisory Committee identified nine of them as being of high importance for addition to the world heritage area. Some others have been gazetted as reserves since 2015.

BLUE MOUNTAINS CONSERVATION SOCIETY RECOMMENDED AREAS FOR ASSESSMENT

BMCS recommended addition areas for AHC assessment	Values	Hectares
Appletree Aboriginal Area	Cultural landscape “within Wollemi National Park”, gazetted in 1972. Contains rock shelter featuring rock art in the form of hand stencils and paintings of human figures”. Publicly accessible via 1.4 km walking track, has protective cage. Hence one of few Aboriginal sites open to public in GBMA reserved land. Consultation with traditional owners required. ²²	4
Bargo River State Conservation Area	Sandstone landscape area with significant connectivity and Biodiversity values	1,970
Ben Bullen State Forest residual, pt. GoS SCA proposal	High conservation areas remaining in State Forest after creation of GOS SCA. At high risk from mining.	2,687
Bonnie Doon	Crown Reserve contiguous with Ngula Bulgarabang Regional Park and Blue Mountains National Park. Aboriginal (ILUA) and historic values. Threatened species inc. Dwarf Mountain Pine (<i>Pherosphaera</i>), <i>Epacris apiculata</i> and <i>Leionema lachnaeoides</i> . ²³	58
Crown land adjacent to former Ben Bullen SF	Contains threatened species associated with the high altitude swamps, wetlands and EEC. Known habitat for the endangered Blue Mountains Water-skink (<i>Eulamprus leuraensis</i>) and Giant Dragonfly (<i>Petalura gigantea</i>), the endangered Bathurst Copper Butterfly (<i>Paralucia spinifera</i>) Capertee Stringbark (<i>Eucalyptus cannonii</i>); Aboriginal site: shelter with pigment art rediscovered in 2012. ¹⁸	126
Gospers Mountain inholding	Significant basalt cap inholding with high importance, in centre of GBMWAH	74

²² NSW National Parks, 2017, *Statement of Management Intent – Appletree Aboriginal Area*.

²³ Blue Mountains City Council, 2016, *Blue Mountains Heritage Register Review – Bonnie Doon Reserves*.

Goulburn River SCA	Conservation values contiguous with Goulburn River National Park. Existing part of NSW National Parks estate	9.7
Jellore State Forest and Flora reserve	Small area on current fringe contiguous with Nattai NP and Bargo SCA. Connectivity with Wingecarribee River.	1,409
Joadja Nature Reserve	Gradient extension of GBMA. Cultural and geodiversity values; contains EEC woodlands + threatened species. ²⁴	830
Koolwong Flora Reserve Gazetted 18/12/2020. Managed as flora reserve by NPWS	Part of the McPherson State Forest, links up with protected sandstone landscape on the Hornsby Plateau. Patches of wilderness with high levels of biodiversity. Includes wildlife corridors that run both east-west and north-south. Contains wide variety of habitats, including bare rock terrain, moist gullies and dry sclerophyll forest with a rich understory of plants. Potential to host a diverse suite of native animals. Home to a healthy population of vulnerable eastern pygmy-possums, and 24 other threatened native animal species have been recorded here.	1,874
Maiyingu Marragu Aboriginal Place	Very significant Aboriginal cultural heritage sites. Adjacent to Gardens of Stone SCA.	491
Mares Forest National Park	High biodiversity value and contiguous with the GBMWSHA. High elevation, cold, dry country gradient extension in the South Eastern Highlands Bioregion. Cold montane areas potentially very important future climate change refuges. Known habitat for a number of threatened species, including the Buttercup Doubletail Orchid, rare in GBMWSHA. Additional threatened species includes the Greater Glider and Gang-gang Cockatoo, both declining at lower, warmer elevations in the Blue Mountains due to climate change. Mares Forest NP particularly important as a refuge area supporting high densities of Greater Gliders. ²⁵	2,559
Munghorn Gap Nature Reserve	Area of high importance close to Goulburn River National Park, which is contiguous with the GBMWSHA. Dry, low elevation north-westerly gradient extension to the existing GBMWSHA. Transitional zone between eastern, western, northern and southern biota.	6000

²⁴ NSW Government, 2013, *Joadja and Wollondilly River Nature Reserves Plan of Management*, NSW Office of Environment and Heritage, viewed 16 November 2022, <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/joadja-wollondilly-river-nature-reserves-plan-of-management-160137.pdf>.

²⁵ Smith, P. & J., 2022, *Recommendation to include Mares Forest National Park in Australian Heritage Commission's assessment of additional areas for inclusion in Greater Blue Mountains World Heritage Area*.

	<p>Supports a diverse flora and fauna, including a number of threatened species and threatened woodland birds which are poorly represented in the GBMWhA, including:</p> <ul style="list-style-type: none"> • Critically Endangered Regent Honeyeater; • Critically endangered Swift Parrot; • Endangered Broad-headed Snake; and • Gang-gang Cockatoo. 	
Ngula Bulgarabang Regional Park	Upper Blue Mountains sandstone plateau and with rock outcrop and heath, rainforest and tall forest vegetation. ¹⁵ Many threatened species including high quality sites of rare Dwarf Mountain Pine (<i>Pherosphaera</i>) sites are the western limit of the species. High Aboriginal significance includes Black's Ladder which has state Heritage status as part of the Historic Walking Tracks group.	306
Putty State Forest includes Wollemi Flora Reserve	<p>Putty State Forest makes up a large part of the "Putty Hole" - a large area between Wollemi and Yengo NPs. Enclave in GBMWhA with significant biodiversity, upper catchment of Macdonald River. Significant fauna.</p> <p>Wollemi Flora Reserve lies on the Great Dividing Range (NSW Hunter region), and is part of a regional habitat corridor for wildlife, linking up with many valuable conservation lands. The reserve borders Wollemi Wilderness, NSW's largest wilderness area. Its landscapes and variety of plant life vary greatly, creating diverse habitats, including rocky environments that host rich reptile life, such as the threatened Rosenberg's goanna. The Flora Reserve is also home to 17 other threatened animals including yellow-bellied gliders, glossy-black cockatoos and giant burrowing frogs.</p>	22,252
Sublime Point Reserve	Adjoins BMNP and contains the largest known population of endemic Needle Geebung (<i>Persoonia acerosa</i>) and other rare species. ²⁶	4.5
Wiarborough Nature Reserve connected to BMNP	Three areas with conservation values and adjacent to the Blue Mountains NP and Abercrombie NP, via private vegetated lands (some with Conservation Agreement). One endangered ecological community and several threatened species. ²⁷	2,228

²⁶ Blue Mountains Bushcare, 2021, *Sublime Point Bushcare Group*, Blue Mountains City Council, viewed 16th November 2022, <https://sublimepoint.bushcarebluemountains.org.au/>.

²⁷ NSW Government, 2014, *Wiarborough Nature Reserve Statement of Management Intent*, NSW Office of Environment and Heritage, viewed 16 November 2022, <https://www.environment.nsw.gov.au/research-and-publications/publications-search/wiarborough-nature-reserve-statement-of-management-intent>.

Wollemi State Conservation Area	Contiguous to Wollemi NP	2,353
Wollondilly River Nature Reserve	Small area (971 ha) on Wollondilly River with connectivity and endangered ecological communities. Low rainfall gradient extension	971
Yango State Conservation Area contiguous to Yengo NP	Forms part of two regional corridors from Yengo National Park to Corrabare State Forest targeting the yellow-bellied glider and brush-tailed rock wallaby. Threatened species - Yellow-bellied glider; glossy black cockatoo (on boundary); Grove's paperbark (<i>Melaleuca groveana</i>). Adjacent to Greater Blue Mountains Key Biodiversity Area; Cultural heritage.	684
Yellomundee Regional Park	Contains a significant length of the eastern BM escarpment and the LSC and its features some examples of Rickabys Creek Gravels and inclined beds of Hawkesbury Sandstone (important to geo history) at least 2 x EEC and one threatened species. Adjoins BMNP at northern end and extends GMB to near sea level on Nepean River. Has state-significant Aboriginal heritage precinct and sites. ²⁸	485
Yerranderie Regional Park	Partly forested, partly cleared area less important than Yerranderie SCA	470
	Subtotal:	45,286.2 ha.
	Total:	294,632 ha

3. Additions to areas added to the eight GBMWA reserves since 2000 listing.

The GBMWA comprises eight conservation reserves as set out in the table below. When the nomination for World Heritage listing was prepared in 1998 (prior to listing in 2000) the total area of these reserves was 1,032,649 ha. Only the area that was within the 8 reserves at time of nomination is now included in the WHA. Since 1998, approximately 40,000 ha has been added to the constituent reserves. These additions currently have neither National nor World Heritage status and are proposed for assessment by the Australian Heritage Council.

²⁸ NSW National Parks and Wildlife Service, 2009, *Yellomundee Regional Park Plan of Management*, Department of Environment and Climate Change NSW, viewed 16 November 2022, <https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Parks-plans-of-management/yellomundee-regional-park-plan-of-management-090510.pdf>.

WHA RESERVES	Area in 1998 (ha)	Area added since 1998 (ha)
Blue Mountains National Park	247,840	21,392
Gardens of Stone National Park	15,150	595
Jenolan Karst Conservation Reserve	2,422	663
Kanangra-Boyd National Park	65,379	6,284
Nattai National Park	47,855	2,923
Thirlmere Lakes National Park	641	37
Wollemi National Park	499,879	4,949
Yengo National Park	153,483	4,385
TOTAL AREA	1,032,649	41,228

The addition of the approximately 40,000 ha to the constituent reserves since 1998 could be considered a minor boundary modification to the existing WHA - it would not have a significant impact on the extent of the property (increases area by 4%) nor affect the Area's Outstanding Universal Value. The Australian Government could seek a minor boundary adjustment through application to the World Heritage Centre independently of the proposed National Heritage List assessment process and thus deal with these additions.

The Society supports these additions and recommend they should be added as a boundary adjustment. We will be writing separately to NSW Environment Minister in relation to this.

Conclusion

The Society's recommendations meet all key criteria for scenic, geodiversity and cultural heritage as well as biodiversity for additional areas. All these values are interconnected. The bigger area will benefit the nation by protecting more species and ecological communities while bringing them into one management system for conservation and it will add new species to the national park estate. This in turn will increase the likelihood of threatened species surviving the future threats from global warming.

Thank you for the opportunity to make a submission on this important issue for the health and protection of the Greater Blue Mountains.

Yours sincerely



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