

Submission on the Gardens of Stone Draft Plan of Management, environmental scientist and writer

By Dr Haydn Washington, former Secretary of the Colo Committee (1980 to 2017)

Introduction

I write as the former Secretary (and key lobbyist) for the Colo Committee, that started the Gardens of Stone campaign in 1980, created the ‘Gardens of Stone’ title (Rodney Falconer as Chair coined the term), and led the campaign for the first 15 years, and was a key partner for most of the rest of the time (with Colong Foundation, Blue Mountains Conservation Society and Lithgow Environment Group). I attach here my history of the GOS campaign as Appendix 1. As an environmental scientist I was lead author (with geomorphologist Dr Robert Wray) of the paper ‘The Geoheritage and Geomorphology of the Sandstone Pagodas of the North-western Blue Mountains Region (NSW)’ in *Proceedings of the Linnean Society of New South Wales* 132, 131-143 (attached also to my submission). I also wrote Chapter 1 of Values for a New Generation entitled ‘Recognising new values: The geodiversity and geoheritage of the Greater Blue Mountains’ (published by the Greater Blue Mountains World Heritage Advisory Committee in 2015). This chapter gave substantial discussion of the geodiversity values of the GOS area, as GOS was proposed to be added to the World Heritage Area by the Advisory Committee. This chapter pointed out that GOS has three features of international significance:

- Platy pagodas
- Bottleneck valleys
- An extensive array of superb narrow slot canyons.

I would note that only the *first aspect* is referred to by the draft POM and the draft Master Plan. Indeed geodiversity is not mentioned in the POM and only finally mentioned in the Master Plan on p. 14. This is despite the fact that key NPWS managers such as Bob Conroy have championed geodiversity for many years. This is a serious oversight as geodiversity includes a) geology, b) geomorphology and c) soils whereas the POM only refers to geology. The pagodas and slot canyons and bottleneck valleys are all *geomorphological* features, not primarily geological ones. The Threatened Highland Peat Swamps on Sandstone (THPSS) are also a key part of the geodiversity of GOS. The geodiversity values of GOS are thus being downplayed by NPWS in both the POM and the Master Plan.

Major comments on the POM

- 1) This is a POM for a State **Conservation** Area not a State Recreation Area, yet the first Management Objective and Strategy (4.1) refers to tourism *not* conservation (number 2). This is the wrong way around, the key management objective for an SCA *should be conservation* not tourism.

- 2) The POM gives remarkably little information about what is actually ‘planned’, and the maps are sub-standard. It gives a vague Figure 3 that shows some dots as ‘multi day walk visitor accommodation nodes’. There is no information as to whether there will be access or maintenance roads to all these sites - or just some of them. Access roads to all these sites would have a huge impact on the biodiversity and geodiversity of GOS.
- 3) There is no clear statement that all pine plantations will be removed, or by when. Nor is there a clear statement that rehabilitation will be carried out by *local provenance native species*. The latter point is essential to the conservation values of GOS.
- 4) On p. 8 it says ‘Cleared areas – Identify potential investment sources (such as carbon projects) to enable rehabilitation and restoration of priority revegetation projects’. Carbon projects need to be handled carefully in terms of their ecological impacts. Other examples have not followed this rule, such as that in Capertee Valley NP, where a natural grassland was planted with trees. All plantings in GOS SCA *must* be local provenance species, and probably there will need to be a specific collection and nursery to grow these. Hence this will take time, whereas the mindset around carbon projects by NPWS seems to be to get this in *immediately*, even if the wrong species are used ecologically. This needs to be carefully researched, absolutely transparent in terms of what will take place (and when) and it must make clear that conservation outcomes using local provenance species *come first* over carbon projects.
- 5) The POM and Master Plan seem to indicate that some trails will be for bushwalkers *and* mountain bikes. This is not a happy or workable strategy, as most mountain bikes don’t have bells, travel faster than walkers, and seek to zip by at speed. There will be collisions and injuries if you try to cram both user groups on to one narrow track.
- 6) In general I support the Lost City being a key tourist hub, as while it gives superb views of pagodas, most of them are not accessible to people climbing over them, and hence have not had their ironstone banding snapped off by clumsy walkers (as has happened to the one pagoda next to where 4WDs park). However, I have concerns about the area being handed over to a commercial operator if this means they build greater access to undamaged pagodas (such as where the planned zip line terminates and a road or track to that site). I also support the ongoing use of the forest camp as a major camp site.
- 7) The POM on p. 8 states:

‘Mining – Develop and implement environmental management plans to minimise impacts on park values arising from mining activities, monitoring, mining infrastructure and mining decommissioning/rehabilitation works’.

The history of the GOS campaign in Appendix 1 shows that there is a sorry history with coal companies and environmental protection. In the 1980s Angus Place and Baal Bone Collieries claimed cliff collapse were ‘natural’ - until the Department of Mineral Resources at the Airly Commission of Inquiry in 1994 stated clearly they were **caused by longwall mining** (125 collapses in Baal Bone and 55 in Angus Place over 2 years). Centennial Coal has continued

to argue that longwall mining under THPSS swamps does not cause drying out of swamps or creeks disappearing down cracks – despite the extensive evidence that longwall mining does dry out swamps (e.g. Hensen 2010). As I lobbied Centennial extensively over some years re a SCA over Airly and Genowlan (now Mugii Murumban SCA) we were informed: a) they would **only mine half the coal**; and b) they would **never use longwalls**. However they have gone back on that undertaking, and now take two thirds of the coal and are using longwalls (albeit narrower than at Springvale). As a result there has been extensive subsidence way beyond the 150 mm promised by Centennial - and major cracking of pagodas. They have now been fine for breaking that commitment. Similarly, Centennial could stop longwalls from going under swamps on Newnes Plateau (and hence protect these EECs) and only lose perhaps 1-2% of the coal resource, but have refused to take this pro-environmental action. Hence the Endangered Ecological Swamp Communities remain under serious threat (especially in a climate change world) where large areas could be degraded or cease to exist. NPWS needs to **undertake extensive mediation** with mining companies such as Centennial to ensure that their activities do NOT impact adversely on the SCA. Mining companies cannot continue to make promises that there will be ‘no impact’, when clearly there has been (and still is) major impact on the ecological integrity of GOS. The importance of this issue cannot be downplayed, and must be addressed to protect the conservation values of GOS.

- 8) Cultural burning is a topic much in the limelight, but must be handled in an ecologically-sensitive manner (given actual Aboriginal fire practices of the past have been lost for the GOS area). My personal experience on the GBMWH Advisory Committee has shown that Aboriginal people are attending fire workshops in savannah country in Qld - which has a totally different fire regime, and seeking to apply this to the Greater Blue Mountains Area. If carried out would almost certainly lead to changed plant communities and extinctions. There is thus a need for major dialogue on this topic between Traditional Custodians, plant ecologists and conservationists, so that cultural burning proceeds in a cautious and ecologically-sustainable way.
- 9) Currently the NPWS is directed by the NSW government to treat dingos as ‘wild dogs’ and to poison and trap them. In fact genetic research by Dr Kylie Cairns and colleagues (Cairns et al 2019) of NSW Uni has shown that the majority of canids in national parks are either *pure dingos or majority dingo genome*. These are essential top predators in the area that control feral cats and foxes. They should **not** be poisoned or trapped in GOS SCA or adjacent national parks. The rest of the world is busy reintroducing top carnivores such as wolves and bears to conservation areas, while NSW continues to seek to wipe out our top carnivore that is essential to ecosystem health. This is a disgrace, and makes a joke of the NSW government’s claim that it supports conservation initiatives.
- 10) Horses should only be allowed on park roads and management trails – NOT on any other tracks. Horses bring in exotic weeds and cause far greater erosion than walkers, and should never be allowed on the highly erodible soils of GOS.

Minor points

- The campaign was started in 1980 by the Colo Committee, so is arguably the longest running conservation campaign in NSW or Australian history, and this should be noted.
- There are 6 parks that make up the GBMWA, not 5. These are: Wollemi, Blue Mountains, Yengo, Kanangra Boyd, Nattai and Thirlmere Lakes.
- The section on Nationally Significant Pagoda Landscapes is confused. This is Triassic Narrabeen sandstone, and the platy pagodas are mainly found in the Banks Wall subgroup, with smooth pagodas often in the Burra-moko subgroup below this. It refers to 'plates' as if they are a separate pagoda feature when they are the ironstone banding on platy pagodas, not a separate feature. Platy pagodas are not 'ridged' but 'stepped cones' caused by differential weathering of the ironstone banding in the Banks Wall sandstone (Washington and Wray 2011). The term 'ridged' gives entirely the wrong impression of what platy pagodas are like.

A final point re Master Plan and POM - honouring a key campaigner for GOS

This will be discussed further in my comments on the Master Plan, but is relevant to the POM also. The Master Plan indicates a lookout at 'Bungleboori North'. This is in fact an area discovered by the Colo Committee many years ago, and named the 'Lost World'. One of the key campaigners for GOS over 4 decades was architect David Blackwell, who fell in love with a particular structure 'David's Wall' at the end of the long ridge in the Lost World. After he succumbed to cancer, we scattered his ashes there (see lower right). We believe, out of respect for a major campaigner for GOS, that the walking trail should *not* extend all the way along this narrow ridge to that site at the pagoda shown on the lower left, but should stop at the knoll well above this ridge, which is **still an excellent lookout**. If the track did extend to that pagoda, it would be degraded by people clambering over it, and breaking off the fragile ironstone bands. It would also inevitably suffer from litter, chip packets, chocolate wrappers etc – **not a fitting memorial to a great campaigner for GOS**. Even more worrying, the Master Plan states on p. 41 that there will be '4WD access' to the Bungelboori North Lookout! This is totally inappropriate, there is vehicle access along the main ridge above, which is where parking should be, with a walking track (not a 4WD track!) to the lookout about a kilometre away.



We thus urge NPWS to terminate the track at the knoll above this narrow ridge and create the lookout there, which is a perfectly good lookout site, looking out onto many glorious pagodas. Having previously shown respect to the Moffitts of Lithgow as campaigners of GOS by naming pagodas after them, we hope NPWS would show respect to David Blackwell's decades of service to GOS by *not* extending the track all the way along this ridge. His special place in GOS, the site where his remains were scattered, deserves respect by making sure it is not degraded.

Conclusion

The POM is confused as it does not make clear that conservation in the GOS SCA is its key objective. Instead it prioritises tourism, yet fails to actually give key information as to what will happen where (or when). Far too much priority is given to 4WDs and mountain bikes. The POM even seeks to force bushwalkers and mountain bikes to use the same narrow track. This will cause accidents and injuries, and also degrade the 'sense of wonder' experience of bushwalkers in GOS. NPWS should totally rethink the 'sense of wonder' experience and prioritise this in the POM.

GOS is a geodiversity and biodiversity superlative, there is **no place this this anywhere else in the world**. To keep it requires we show respect and a 'duty of care' to keep it intact. The draft POM fails to do this. The focus in the POM must *now return to conservation*, not open slather for tourism. GOS is a sacred place, the POM needs to be radically reviewed so that we celebrate and care for this iconic and unique wonderland.

References

Cairns, K. et al (2019) 'Dingoes found in New South Wales, but we're killing them as "wild dogs"'. The Conversation, see: <https://theconversation.com/dingoes-found-in-new-south-wales-but-were-killing-them-as-wild-dogs-126184>.

Hensen, M. (2010) 'Newnes Plateau Shrub Swamp Aerial Condition Assessment Project'. Save Our Swamps, Blue Mountains City Council.

Washington, H.G. and Wray, R. (2011) 'The Geoheritage and Geomorphology of the Sandstone Pagodas of the North-western Blue Mountains Region (NSW)', Proceedings of the Linnean Society of New South Wales 132, 131-143.

Washington, H. and Wray, R. (2015) 'Recognising new values: The geodiversity and geoheritage of the Greater Blue Mountains', in Values for a New Generation, Sydney: Greater Blue Mountains World Heritage Institute.

Appendix 1

History of the campaign for Gardens of Stone from 1980 to 2021.

Dr Haydn Washington (former Secretary of the Colo Committee, Director NCC 1988, Vice Chair Colong Foundation 2018-2020). Dec 3rd 2021¹



B/W drawing of idealised pagoda (Cape Horn), with rock wallaby. Rodney Falconer

As a new GOS reserve has been announced by the NSW government in November 2021, it is thus worth revisiting the history of the Gardens of Stone campaign, year by year:

1932. Myles Dunphy helps establish the National Parks and Primitive Areas Council, and includes GOS in in the proposed Greater Blue Mountains National Park.

¹ The author thanks Rodney Falconer, Karen McLaughlin, Chris Jonkers and Julie Favelle, Ian Brown, Brad Smith, Madi Maclean, Yuri Bolotin and Joel Robinson for comments (and providing photos) on the document.

1977. National Trust proposes a ‘Pinnacles National Park’ over pagoda country (however no campaign followed up on this).

1979. Wollemi NP gazetted, putting an end to the idea of a 6000 MW power station at Birdsrock on Newnes Plateau, with dams on the Colo (at Boorai Ck) and in the Wolgan river.

1980s. Trucks would drive near pagodas to break off the purple ironstone for sale as ‘black crinkly’ bushrock. There was *zero* general awareness of the geomorphological significance of pagodas or slot canyons.

1980. The Colo Committee led the campaign for Wollemi NP 1974-1979, but mostly focused on the Colo gorge. In 1980 after Wollemi was gazetted it turned its eyes to the pagoda country to the west of Wollemi, since we could see these odd rock formations from a distance. We found a wonderland of sandstone pagodas li*ke lost cities, temples, slot canyons and overhangs. We first walked from Newnes to the Red Rocks, then later along the Wolgan Capertee divide in several walks that reached Baal Bone Point. We did many walks to Pt Cameron via Stargate tunnel. We also visited Genowlan Mtn and later Mt Airly and found it a feast of geodiversity and biodiversity in a fairly small area.



Rodney Falconer, Haydn Washington and David Blackwell of Colo Committee (left to right).

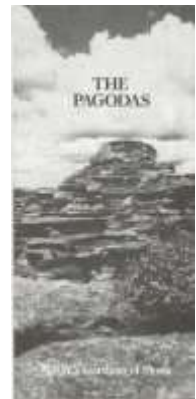
Early 1980s. The Colo Committee spent a lot of time researching the area in Angus Place Colliery (Centennial Coal) that was mining around Lambs Ck and causing significant collapses. They were going to mine under Blackfellows Hand Cave (now Maiyingu Marragu Aboriginal Place) and we pointed out to Centennial Coal it was the *most significant* Aboriginal art site on the western side of Wollemi. They agreed to move the longwall a km to the west, where (after mining) there was in fact a huge cliff collapse of over 100,000 cubic metres of rock (see below). At that time there was no local Aboriginal Land Council that could assist. Although this is Wiradjuri country (with some debate from the Gundungurra) we could not find any Wiradjuri people at that time who knew the pagoda country (we did much later). Maiyingu Marragu would have collapsed if mined, so the Colo Committee action averted this tragedy. However Centennial Coal at this time continued to claim that the major cliff collapses were ‘natural’, despite the abundant evidence to the contrary.



Left: Maiyingu Marragu.

Right: Huge collapse caused by longwall mining at Angus Place Colliery one km west of Blackfellows Hand Cave in early 1980s (now Maiyingu Marragu Aboriginal Place).

1983 and 1988. Colo Committee developed and printed the leaflet 'The Pagodas: NSW Gardens of Stone'. At that time the spectacular rock formations were called pinnacles, stupas and pagodas - so the Colo Committee formalised the use of the word 'pagoda' for the stepped cone formations (both platy and smooth).



1984. The Colo Committee took environment Minister Bob Carr out to Pt Cameron. While sympathetic he was aware that politically the numbers were against conservationists as local Labor member Mick Clough was totally opposed.

1984. Haydn and Rodney of the Colo Committee agree to go down the Angus Place Colliery to see longwall mining first hand. The mine manager gave us assurances that the destruction of pagodas was a minor consequence, that they would 'grow back in a thousand or so years'.



1985. The Colo Committee released 'The Gardens of Stone National Park Proposal' in September 1985, which the Colong Committee (name at that time) and the Federation of Bushwalking Clubs signed on to. The name 'Gardens of Stone' was coined by Rodney Falconer based on a trip by the Colo Committee to Pt Cameron in spring (c. 1983) where the heathland was in full bloom.



1985. The Colo Committee, Colong Committee and the Wilderness Society take MPs Nick Greiner and Tim Moore (before they were elected to power) to Pt Cameron on Wolgan/ Capertee divide to lobby for the protection of the Gardens of Stone. We also later took Pam Allan, the Labor Minister for the Environment, to 'Kevin's Watch' (named by David Blackwell of the Colo Committee) on the Capertee/Wolgan divide. However, she informed us Labor would not support a national park as the Labor Member Mick Clough would cross the floor in Parliament. This was despite the fact that the Department of Mineral Resources had admitted that the northern part of Newnes Plateau had thin coal seams that were *unmineable*.



Late 1980s to early 1990s. The Colo Committee took dozens of walking parties into GOS, primarily to Angus Place and Baal Bone Colliery leases, to Point Cameron, to Genowlan Mountain and to Rock Island on Newnes Plateau. Later we took groups to Gooches Crater and Baal Bone Pt. Henry Gold of the Colong Foundation produced the wonderful full colour posters of GOS. We also gave many slide shows to groups.



Rodney Falconer, Haydn Washington and artist Jeannie Baker at the German Bakers Oven on Mt Airly, c. 1986.

1991. Novacoal produced an EIS to mine Airly and Genowlan mesas that had many errors.

1992. The Colo Committee went to the Mining Wardens court in 1992 and *actually won* the case as the EIS was highly erroneous. Novacoal sold its interests to Centennial in 1997.

1993. The Airly Commission of Inquiry was held in 1993, where for the first time the Dept of Mineral Resources admitted the cliff collapses were *caused by longwall mining* dropping the surface 1-2 metres. Angus Place caused 52 collapses and Baal Bone caused 124 over 2-3 years. We won all points of fact, but the Airly mine was approved by Commissioner Simpson for coal extraction by bord and pillar. However, quite strict conditions were imposed by the Inquiry. Airly was in fact not mined till 2009 by Centennial Coal.



The high cliffs of Genowlan Point, threatened by Airly mine.

1994. The Colo Committee was somewhat burnt out after this 1993 Inquiry, and the Colong Foundation undertook the primary lobbying. It was Keith Muir of the Colong Foundation in 1994 who was the primary lobbyist of the Liberal Government to create the Gardens of Stone National Park (originally 11,780 ha with 3,600 ha Pantoney's Crown added in 1995). This covered only the area of unmineable coal so that two thirds of the original proposal *was not protected*. Hence the need for a GOS2 proposal.



Pantoney's Crown

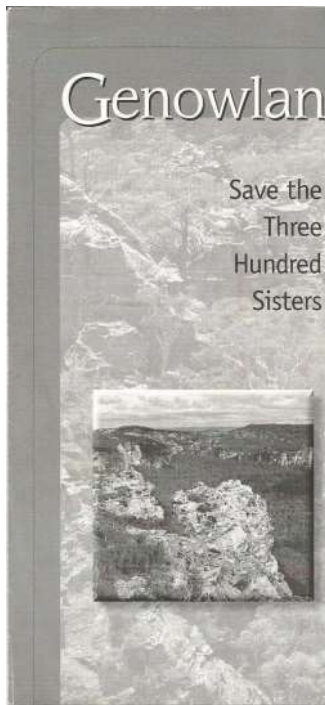
c. 1995 BMCS (Lyndal Sullivan) commissioned Haydn Washington to write a proposal to create an endangered ecological community over the swamps of the Blue Mountains. The NSW Scientific Committee suggested we go to the Commonwealth and nominate it as a vulnerable community, which we did. After many years however the Commonwealth came back and suggested it should become an *endangered* ecological community and the 'Temperate Highland Peat Swamps on Sandstone' Endangered Ecological Community (EEC) was finally listed in May 2005. The NSW government created the EEC 'Newnes Plateau Shrub Swamp in the Sydney Basin Bioregion' in 2007.



1997- 1998. *Pultenea* sp. *Genowlan Pt* listed as an endangered species in 1997. Later upgraded to 'critically endangered' in 2011. *Genowlan Point Allocasuarina nana* Heathland declared to be an EEC in 1998 (both nominated by Haydn Washington).



1998. The Colo Committee produces the leaflet ‘Save the 300 sisters’ about Genowlan and Airly Mesas.



1990-2000s. The Colo Committee and Colong Foundation did substantial lobbying of Centennial Coal in the 1990s and 2000s. Baal Bone Colliery agreed to cut short a longwall to protect the ‘Artefact Pagodas’ off Long Swamp Ck. However the Springvale Colliery proposed to mine under the unique Threatened Highland Peat Swamps on Sandstone, just as Baal Bone

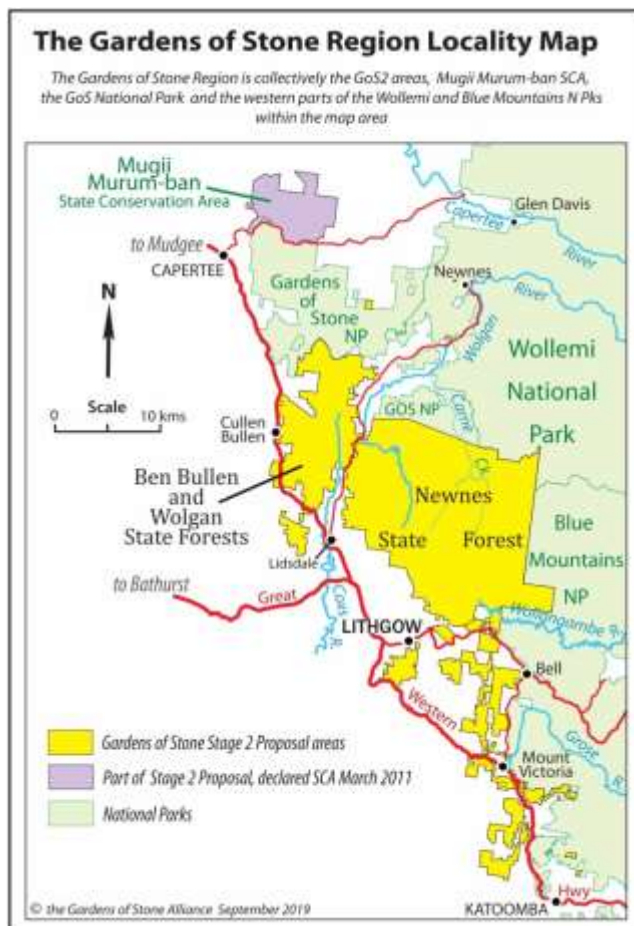
Colliery had mined under the swamps of Long Swamp Ck. Centennial continued to claim subsidence caused by longwalls did not affect swamps.

2000. GOS National Park becomes part of Greater Blue Mountains World Heritage Area.

2001. Booklet 'Focus on geodiversity: sites, values and management for the Hawkesbury Nepean' published by the Hawkesbury Nepean Catchment Management Trust (author Haydn Washington), with a special insert on pagodas.

2005. Lithgow Environment Group Inc (LEG) was formed on 25th August 2005. Water quality, better protection for our natural areas, and swamp protection were identified as the three key local issues.

2005. Launch of proposal for 'Gardens of Stone Stage Two: The Western Escarpment, Airly-Genowlan Mesa, Newnes Plateau and related Crown lands' by Colong Foundation, BMCS and Colo Committee. Proposed 40,000 ha of SCA and National Park. Gardens of Stone Alliance created from Colong, BMCS and LEG (NCC joined later).



2006. One of the first campaigns LEG became involved with was the Pine Dale Open-cut Mine proposal in Ben Bullen State Forest. This was to be the very last mining proposal ever approved by Lithgow City Council, in September 2006.

2006. September, LEG and other Rivers SOS representatives from Mudgee, Illawarra, Newcastle, and BMCS met with the late Hon Peter Andren MP, Federal Member for Calare, regarding damage to rivers and swamps by mining. Whilst Mr Andren explained that these were State issues, it led to LEG members Chris Jonkers and Julie Favell going to Canberra to meet with officers of the Federal EPBC about the damage occurring at that time at East Wolgan Swamp due to Springvale Colliery LW411. This ultimately resulted in Centennial Coal being issued with a \$1.45million Enforceable Undertaking by the Federal Minister for the Environment Tony Bourke on 12 November 2011.

2009. ‘Seeing the Gardens: Blue Mountains: Nature-based Tourism and Recreation in the Gardens of Stone Stage 2 Park Proposal’ launched by Blue Mountains Conservation Society and Colong Foundation for Wilderness.

2009. The Bushexplorers (Michael Keats OAM, Brian Fox and Yuri Bolotin) begin a 9-volume book series, *The Gardens of Stone and beyond*. To-date (November 2021), 8 volumes have been published, with the last one currently in production. The series covers geology and geomorphology, climate, Aboriginal history, water resources, place names, fauna and flora, rare and threatened species, as well 219 bushwalks. The last volume will feature the fight for the protection of Gardens of Stone and more bushwalks.

2010 Gardens of Stone Visitors Map published by Colong and BMCS, designed by Karen McLaughlin (who has also produced many other GOS maps gratis over the years).



2010 till today. Yuri Bolotin and his Bushexplorers group take organized bushwalks into GOS (<https://www.bushexplorers.com.au/about/profiles/bolotin.htm>).

2010. ‘Newnes Plateau Shrub Swamp Aerial Condition Assessment Project’ by the Save Our Swamps project of BMCC found that swamp desiccation closely mirrored the areas that had been mined under by longwall. Coal companies however continued to argue that subsidence was not drying out swamps. This was shown to be false however on Newnes Plateau where creeks could actually be seen disappearing down cracks.

Newnes Plateau Shrub Swamp
Aerial Condition Assessment Project

Caring for Country Save Our Swamps 2010 Project
Author: Michael Hensen, Save our Swamps project Officer, mhensen@bmcc.nsw.gov.au

Stream death – Springvale Colliery



Water from mine discharge disappears down a large crack



The crack when the 14 megalitres a day discharge is turned off

2010. Haydn Washington gives talk ‘The Pagodas of the western Blue Mountains – geoheritage just out of waiting ...’ at the Symposium on Geodiversity, Geological Heritage and Geotourism held at Pt Macquarie, September 6th to 10th.



2011. The Colo Committee and Colong Foundation lobbied Centennial Coal for many years to support a State Conservation Area over Airly and Genowlan (that would protect the surface but could be mined under). Centennial showed true leadership at this time by agreeing. Conservation groups lobbied the NSW Environment Minister Frank Sartor on this, and in March 2011 he created the 3650 ha Mugii Murum-ban SCA over Airly and Genowlan in the last week in which he was in government.

Mugii Murum-ban SCA, the 'jewel in the crown' of the Capertee Valley deserves that we *get it right*



2011. Haydn Washington of the Colo Committee worked with geomorphologist Robert Wray to produce the paper 'The Geoheritage and Geomorphology of the Sandstone Pagodas of the North-western Blue Mountains Region (NSW)' in the *Proceedings of the Linnean Society of NSW* (**132**: 131-143). As Robert Wray had visited sandstone formations around the world we were able to confirm that platy pagodas were of *international significance* (while smooth

Figure 2 OPPOSITE, a: Pagoda Daisy (*Leucochrysum graminifolium*); b: Smooth pagoda at Pt. Cameron, with platy pagodas in strata below; c: detail of b; d, e: Platy pagodas, Bungleboori Ck, Newnes Plateau; f: Platy pagodas at Gooches Crater.



pagodas were of national significance).

2011. 14th May. Banner drop and Gardens of Stone Rally above Invincible Colliery organized by GoS Alliance campaigner Justin McKee. Several hundred people attended, EcoPella sang, several politicians attended (e.g. Cate Faerhmann, John Kaye).

2011. September, Department of Planning rejects the first round of Coalpac Consolidation Project because the EA did not adequately address the project's potential impacts on biodiversity; natural, historic and Aboriginal cultural heritage; noise and air quality; and groundwater, (and because Chris Jonkers of LEG discovered a population of about 1500 *Persoonia marginata*, Vulnerable EPBC and TSC Acts within the Proposal area). (images below from Colong Foundation leaflet on Coalpac)



Location of the Huge open cut north of Lithgow (east of Cullen Bullen). All the area in red lines will become a gaping hole in the ground, with sheer faces coming right up to the pagoda rock formations, which will then be mined under using horizontal augers ('highwalling').

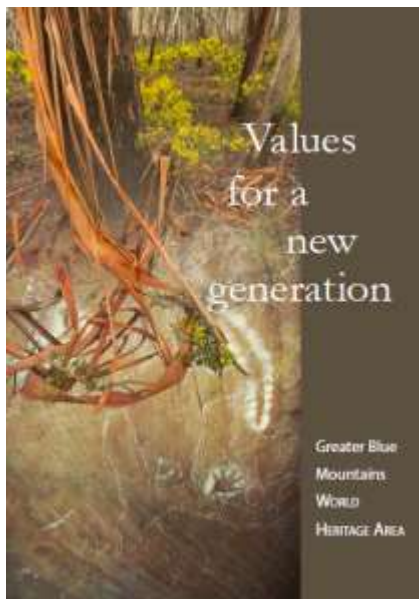
2012. The planned giant open-cut coal mine Coalpac north of Lithgow was rejected by the Planning Assessment Commission (PAC) (after major submissions by most envt groups). The smaller proposed Cullen Valley mine was also later rejected in 2014 by a PAC.



2013. Tour of GoS2 proposal area with Environment Minister Robyn Parker. A subsequent report rejected GoS2, apparently because it was supposedly just Sydney sandstone flora which was already adequately protected in the NSW Conservation Estate, and because the area was supposedly “too degraded”.

2013. December, *Icons Under Threat* was a short series of films produced by the Nature Conservation Council to raise awareness of the terrible toll that coal and gas industries are having on natural heritage, one of which is about Ben Bullen SF in GOS (<https://www.youtube.com/watch?v=mmm-amIs3B4>).

2015. The Greater Blue Mountains World Heritage Advisory Committee produced the ‘Values for a New Generation’ report on the WHA. Haydn Washington and Robert Wray wrote the chapter ‘Recognising new values: The geodiversity and geoheritage of the Greater Blue Mountains’. This noted that GOS had **three features of international geodiversity significance**: 1) platy pagodas; 2) major slot canyon system; 3) bottleneck valleys (Wolgan and Capertee).



2015. Clarence coal tailings dam collapses, polluting 10 km of the Wollangambe river, including areas in the WHA. Centennial Coal fined \$1 million in 2017. Colong Foundation, BMCS, and LEG campaign re impact of longwall mining on Newnes Plateau over several years.



2015. Sunnyside East Swamp, Carne West Swamp, Gang Gang East Swamp, Gang Gang West Swamp, Carne Central Swamp, and the upper part of Paddy’s Creek Swamp begin to die after being undermined by longwall mining by the Springvale Extension approval.

2015. Airly PAC approves mining under Genowlan Point, including the Heathland EEC and the critically endangered *Pultenaea sp. Genowlan Pt.* Two thirds of coal now to be mined instead of the 50% of coal promised to the Colo Committee and Colong Foundation at previous meetings. One third of coal to be mined under Genowlan Point, despite its sheer cliffs and steep talus slopes and jointing in the sandstone, and the fact it contains an EEC and critically endangered *Pultenaea*.



2016. The ‘Gardens of Stone: In Focus’ photographic exhibition held in September 2016 by the GOS Alliance at the University of Sydney Law School won that year’s NSW National Trust’s Advocacy Award for an outstanding campaign.



Keith Muir of Colong Foundation with Joan Domicelj, former Chair of Greater Blue Mountains World Heritage Advisory Committee

2016. Publication of ‘The Gardens of Stone Reserve Proposal: Towards National Heritage’ for Colong Foundation & BMCS, authored by Ian Brown. This is a comprehensive assessment of the natural and cultural heritage values of the area.

2016. Film ‘Australia’s Gardens of Stone’ produced by Joel Robinson for the GOS Alliance (narrated by Haydn Washington and Beth Champion). See <https://www.youtube.com/watch?v=4XY4kEESC6E&t=224s>

2017. Colo Committee disbands due to low membership.

2017. Banner drop/GOS rally above State Mine Gully organized by GOS Alliance, attended by several hundred people.



2018. Springvale mine (Centennial) fined \$15,000 for damage to Sunnyside Swamp on Newnes Plateau.

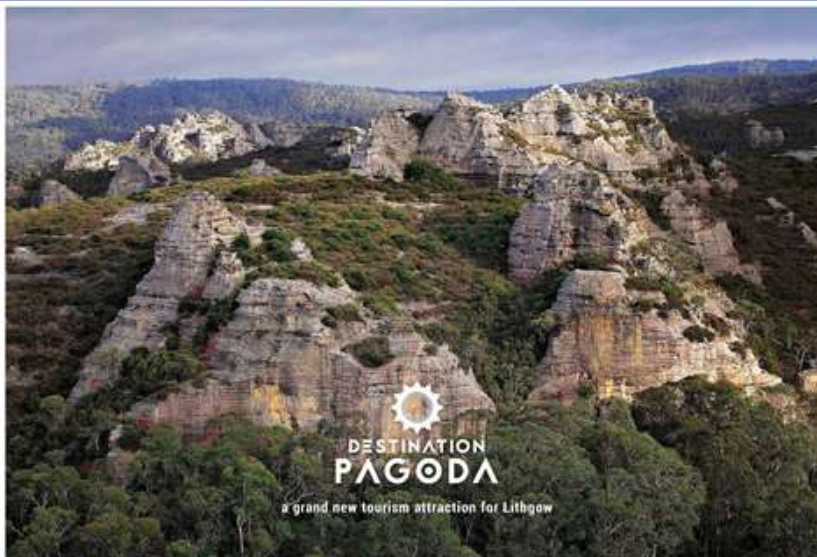
2018. August, Legendary activist Jack Munday speaks out in support of GOS2.

2019. Film 'Gardens of Stone – Stage 2' produced by Tom Zubricki for the Colong Foundation. See: <https://www.youtube.com/watch?v=hycFbPhGEk>

2019. Centennial breaks promise to only mine using bord and pillar on Airly and Genowlan and uses longwall mining, but with narrower longwalls than on Newnes Plateau.

2019. 'Destination Pagoda' report produced by GOS Alliance, authors Ian Brown & Elizabeth Dudley-Bestow. This is a visitor management proposal for a proposed 39,000 hectare Gardens of Stone State Conservation Area. Includes an Economic Study that showed could bring 420,000 visitors a year to the region, provide 258 jobs and \$40 million a year (<https://www.destinationpagoda.com.au/>).

Destination pagoda – an ecotourism future for Lithgow



2019. 30 June, CRUMA (Combined Retired Union Members Association) hold a celebration to honour two strong unionists and environmentalists - Vernon and Joyce Moffitt, and Lithgow's spectacularly beautiful pagoda landscape in GOS. NPWS honours them by naming pagodas after them (and a fire-trail).



2020. Chris Jonkers of LEG recorded on Atlas of Living Australia and iNaturalist significant populations of *Xerochrysum palustre* (Vulnerable EPBC Act & NSW BCA) within the Angus Place Colliery and Baal Bone Colliery mine leases. It has never been identified in any EA's for these mines, and represents the most northerly records for this threatened Species in Australia. He also records numerous populations of *Genoplesium superbum* (Endangered NSW BCA) in Newnes State Forest after the fires. It has never been recorded in mining company EAs. He also records numerous populations of *Prasophyllum pallens* (Vulnerable EPBC Act & NSW BCA) in Newnes State Forest within active Springvale Colliery mining areas. It has never been identified in any Springvale Colliery EAs.

2020. 'Economic Research Report: Destination Pagoda' published by GOS Alliance, author Jo Mackellar.

2021. May 15th, launch of Destination Pagoda Economic Research Report at Gang Gang Gallery in Lithgow, with Haydn Washington giving talk on the long campaign to create GOS2 (see: <https://www.youtube.com/watch?v=PCwZExMB6MA>).

2021. To date, Chris Jonkers of LEG has recorded 203 plant species and 8 Threatened Plant species in Newnes State Forest which are currently not shown on the Bionet Atlas. This effectively represents 20% more plant species and 40% more Threatened Plant Species in Newnes State Forest than are currently listed on the Bionet Atlas. This is despite decades of flora surveys and flora monitoring by 'professional' botanists employed by mining companies. Every DA ever approved in Newnes SF has thus been based on grossly deficient Flora Assessments.



Chris Jonkers and Julie Favell of LEG, long-time campaigners for GOS2

2021. 28th April. Parliamentary Friends of Nature visited the proposed Gardens of Stone on its inaugural field trip, with Rose Jackson MLC, Justin Field MLC, Catherine Cusack MLC and Jo Haylen MP and journalists attending (<https://www.smh.com.au/environment/conservation/the-new-katoomba-mps-join-push-for-protection-of-lost-city-20210427-p57mw3.html>).

2021. 5th May. Government MLC Catherine Cusack gave a speech in Parliament in support of protecting the Gardens of Stone Upland Swamps (<https://www.parliament.nsw.gov.au/Hansard/Pages/HansardResult.aspx#/docid/HANSARD-1820781676-86291>).

2021. May. Seven-year-old Leo Williams of Blackheath ran a highly publicised lemonade stall to support the Gardens of Stone, which resulted in a meeting with Planning Minister Rob Stokes and the Parliamentary Friends of Nature (https://www.abc.net.au/news/2021-07-11/lemonade-stand-raises-money-to-protect-lithgow-lost-city/100280940?utm_source=abc_news_web&utm_medium=content_shared&utm_campaign=abc_news_web).

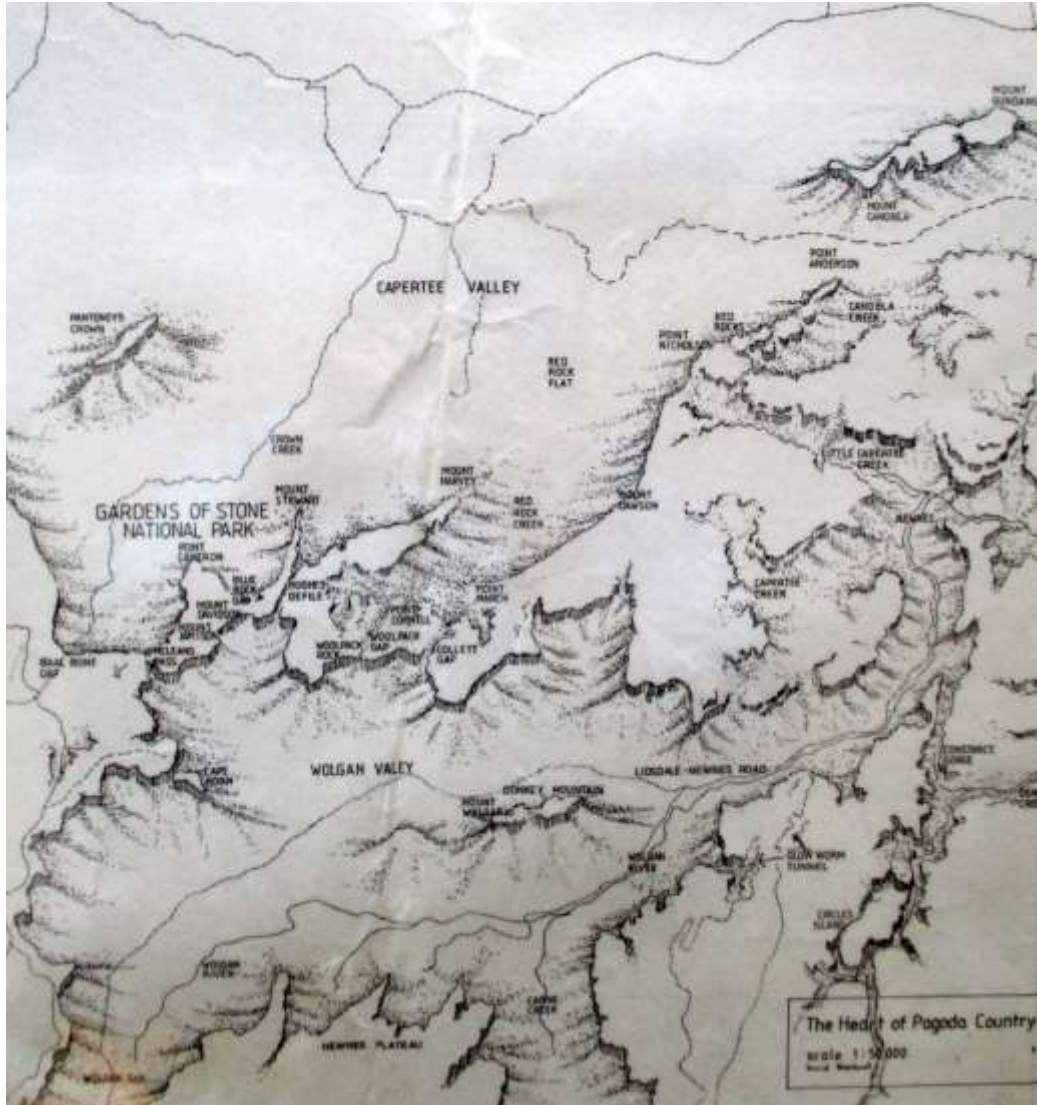
2021. 28th July. Centennial coal withdrew its application for Angus Place extension project after 3335 people lodged submissions in opposition to the development. Centennial cited changing customer needs (i.e. reduced demand for coal) (<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-5602%2120210729T000859.321%20GMT>).

2021. November 13th. NSW Govt announces GOS SCA of 30,000 ha of SCA and national park.
Questions remain about: A 4WD circuit, mountain bike circuit, zip line and climbing walls.
The original 'omnibus' legislation proposed to include provisions that will *weaken* national parks legislation. However, the worrying inclusions in the Bill were largely deleted by negotiations with the environment movement.

(see also next page)



The GOS campaign is one of the *longest campaigns* in NSW conservation history. It is a tribute to the several conservation groups and many advocates who championed this biodiversity and geodiversity wonderland over four decades.



Line drawing of the 'Heart of Pagoda Country' (excerpt) by David Blackwell of the Colo Committee, 1980s.