



"Nature Conservation Saves for Tomorrow"

MONTHLY MEETING

7.30 pm, Thursday 28 June 2012
at the Conservation Hut, Wentworth Falls

The Great Eastern Ranges: Rob Dunn

The Great Eastern Ranges corridor includes the Great Dividing Range and the Great Escarpment of eastern Australia, stretching over 3,600 km from the Grampians in Victoria to far North Queensland. Over millions of years, it has provided a refuge for species and ecosystems to survive and evolve due to a wide range of elevations and latitudes with varied landscape and climate zones. Today the GER corridor contains two thirds of the threatened species in NSW and supplies water to over 90% of the human population of the eastern seaboard.

The Great Eastern Ranges Initiative (GER) is a program that brings people and organisations together to focus efforts to establish a conservation corridor along the mountainous regions of eastern Australia. It is a strategic response to mitigate the potential impacts of climate change, land clearing and other environmental stresses on an area that contains our richest biodiversity.

The GER has helped establish long-term partnerships to conserve, connect, protect and rehabilitate land along this mega-corridor. Since 2007 the focus has been in five regional areas, each with different partners, stakeholders and social dynamics. At the same time progress has also been made at the continental scale with agencies, researchers and NGOs working together. In 2010 the GER moved from a NSW Government to a NGO led program and is expanding into Victoria and Queensland. This dual focus, changing leadership and expansion present several challenges, but also provide opportunities for participation and potential funding. In this context, collaboration is essential, if cross tenure and continental-scale conservation outcomes are to be achieved on a voluntary basis.

Rob Dunn has been the CEO of the Great Eastern Ranges Initiative since 2010. In this role he works closely with a range of community groups, non-government organisations, universities, government agencies and industry.

Come along to the Conservation Hut to hear an interesting talk, find out more about the Society's activities and meet other members over supper. Visitors are very welcome.

BEAT THE TAX MAN

June—time to beat the tax man and make your tax-deductible donation to Blue Mountains Conservation Society.

Cheques please to The Treasurer, PO Box 29,
Wentworth Falls 2782 or go to
www.bluemountains.org.au/donations.shtml

Printed on Australian-made 100% Recycled Paper



**ECO-EXPO—OUR FUTURE
IN THE MOUNTAINS**
**A World Environment
Day Event**
Saturday 16 June 2012
Admission Free

This World Environment Day event will be held on at Mid Mountains Community Centre, Lawson and the adjoining Lawson Public School hall. Hosted by several Blue Mountains community organisations, including Blue Mountains Conservation Society, the event aims to promote sustainable living in the mountains.

Discover some of the latest ideas and technology to make for a more sustainable home and environment; meet the many eco-friendly community groups in the mountains and find out what they are doing; hear talks by leading environmentalists; enjoy a guided walk to Lawson's beautiful waterfalls; get close and personal with a frog; enjoy a photography exhibition; bring the kids to play in a supervised play area and maybe win a prize; and lots more... Program on page 12. Contact info@ecoexpo.net.au

A reason to celebrate! 80th Anniversary Bluegum

This year is the 80th anniversary of the Conservation of BlueGum Forest, an event recognised as a milestone in the history of the conservation movement in Australia.

On page 2, Wyn Jones writes to inspire us to get involved in the celebrations. The proposed program for this year includes:

Blackheath Public School one day trip to Bluegum Forest and creating the **Bluegum Bushroom** – young walkers celebrating in place.

The Bluegum Campout consisting of:

- Art event **"Symbols of our Natural Heritage"** with all campers actively participating, created by Wyn Jones. Requires 200 people with colourful props to make large symbols of the bush.
- **Personal Stories of Bluegum and the Blueys** recorded by Gregg Borschmann.
- Portraits from Bluegum for the **"Bluegum 80th Anniversary Wall"** managed by Wyn Jones and other photographers. Together with quotes from the stories.

**Make WALKING,
especially in the BUSH,
an ARTFORM.**

"Hut News", the newsletter of
Blue Mountains Conservation Society Inc.
P.O. Box 29, Wentworth Falls, 2782
Phone 4757 1872

Email: bmcs@bluemountains.org.au
Web page: www.bluemountains.org.au

President: Lachlan Garland: 0415 317 078
lachlan.a.garland@bigpond.com

Senior Vice President: Tara Cameron
0419 824 974 taracameron4@gmail.com

Second Vice President: Don Morison
8230 2116 2vp@bluemountains.org.au

Treasurer: Bart Beech (h)4739 9947
(f)9688 1440 (w)9896 9512
bart.beech@invensys.com

Administration Officer: Wes Maley 4757 3942
admin@bluemountains.org.au

Bushcare/Threatened Species Officer:
Clive Heywood Barker 0413 577 160
ozbundu@hotmail.com

Environmental Education Officer:
Gary Humble 4784 1648 0427 841 078
gaz.humble@gmail.com

Landuse Officer: Ann Cantwell
4751 3215, cantwell@ef.tel.net.au

Lithgow Regional Subcommittee Coordinator:
Chris Jonkers 6355 1179
chrisandjulie@activ8.net.au

Meetings Secretary: Heather Hull
4739 1493 hhull001@bigpond.net.au

Membership Secretary: Lachlan Garland:
0415 317 078
lachlan.a.garland@bigpond.com

Monthly Meeting Convenor: Brendan Doyle
4757 2197 brendan049@gmail.com

National Parks/World Heritage Officer:
Brian Marshall 4784.1148
briannamar@bigpond.com

Newsletter Editor: Christine Davies
4787 7246 hutnews@bluemountains.org.au

Plant Nursery Manager: Kevin Bell
ph/fax 4787.6436 kevinbell@ef.tel.net.au

Publicity Officer: VACANT
**Sustainable Population and Climate Change
Officer:** Peter Green 4751 9474
peter@pwgreen.id.au

Website Officer: Alan Page 4784 1704
webmaster@bluemountains.org.au

Walks Convenor: Maurice Kerkham
4739 4942
mauricekerkham@hotmail.com

Project Officer-Food and Environment:
Craig Linn craig.csmc@exemail.com.au

Project Officer-Events: Rob Baigent
4759 3104 rob.baigent@bigpond.com

Bushfire Representative: Hugh Paterson
4751.2303, mob 0427 512 303
goodbush@pnc.com.au

**DEADLINE FOR THE NEXT
ISSUE OF HUT NEWS IS
21 JUNE 2012**

hutnews@bluemountains.org.au
47877246

MEMBERSHIP ENQUIRIES

Lachlan Garland
0415 317 078
membership@bluemountains.org.au
PO Box 29, Wentworth Falls 2782

A Real Celebration - The Land, The Place, The People: 80th Anniversary Bluegum Wyn Jones

Every year we celebrate birthdays, anniversaries, Christmas, Australia Day and hosts of others occasions. Why don't we celebrate the land we live in, the place that is full of life, and that gives us the Spirit of Life. The place that makes us feel human and in relation to the others, the thousands of species that make up our life support system? The place now called the Greater Blue Mountains World Heritage Area.

Well let's do that. Let us as Blue Mountaineers cheer-on the Land. Shall we start with an Annual Celebration of this World Heritage Area at the Bluegum Forest on the 1st and 2nd September this year. This year is the 80th Anniversary of the Conservation of Bluegum Forest, an event that gave a kick start to the conservation movement. There's no better place to celebrate than where it all began in 1932.

Celebration calls for a party, but not the average sort of party. For we are the voice of the land, a voice that must be heard by the world. So even though we shall have a party, eat drink and be merry, our energies must be directed to communicating, in a creative way, the Spirit of this Place to other people. It is imperative that our voice be heard so that the natural values of the Blue Mountains are not forgotten by the many.

It is our privilege to be the guardians of this place and ensure that the Voice of the Blue Mountains is not lost in the mists of time. And to ensure that the efforts of the few from the past generations were not in vain.

We must celebrate in the most authentic manner, by being present in this place and demonstrating symbolically what makes this place so special. In that way we publicly and unambiguously show our relationship with the natural values.

Nothing less than should be done— and it should be done annually.

So Blue Mountaineers, Bushwalkers, Climbers and Wilderness Wanderers, come to Bluegum Forest on the weekend of the 1st and 2nd of September this year. This won't be any ordinary campout, but one that will be remembered as well as recorded for posterity. I am asking you to tell your story about this place so it may be recorded forever. Tell the personal and family story, let your feelings be known as well as the facts of your journey with the Blue Mountains. Say why it is important to you.

As well I want many of you to photograph each other singly or in groups in Bluegum. These are to be the images that will be printed and collated as a massive collage called the "**Bluegum 80th Anniversary Wall**" which will be publicly shown in print format, and placed on the internet. And using the modern modes of communication, "Social Media", even as we are celebrating in Bluegum, we will spread the word to the world.

All stories and photos made available to myself, as the creative director, will be placed in the permanent records of the NSW State Library in digital form.

It is my hope that this weekend will be embraced as an annual celebration, by the Blue Mountains Community, the Bushwalkers and the Conservationists. And that schools, families and others will engage and enrich the nature of the celebrations. Perhaps it could become a focus point for the Walking Festival. But we should make sure that the reason for the Celebration is not lost. And that the history that has given us this magnificent natural area continues to be told.

Then and only then will the first weekend in September, when the wattle blooms golden, be a special day for the Blue Mountains, its very own World Heritage **Day of the 100 Gum Trees**. **Wyn Jones**.

JOIN Blue Mountains
Conservation Society,
or renew your membership
online.
www.bluemountains.org.au

The Gardens of Stone Visitors Map

\$7.50 plus \$1.50 postage. Buy the map online (www.bluemountains.org.au), write to BMCS, PO Box 29, Wentworth Falls 2782 with your cheque or money order, or ask for a copy at our monthly meeting.



Membership Matters

My dual roles of president and membership secretary are time-consuming, but there are many ways you, the members, can help me.

Most of my membership problems relate to minor changes you may make to your membership status. All I ask is that you let me know what is changing. Either write a note on the form when you send it in or send me an email explaining any change to a payment made direct to our bank account.

Many problems relate to bushwalking. If you are starting to bushwalk, reinstating after a break or cancelling your bushwalking, please let me know, with a simple note. I have additional work to perform when a bushwalker's status changes.

Initially I made phone calls to follow up changes, I am now finding I do not have time, plus there is the expense of making calls. I now make assumption on what people actually want, in some cases these assumption may not be correct. Please help me to make the membership work that little bit easier and save. Lachlan Garland.

Winter Magic Festival

The Society will have a stall at this year's Winter Magic Festival at Katoomba on Saturday 23 June. You will find us in Main Street opposite the railway station. Do call in and say hello to our volunteers.

If you would like to help for any time during the day you would be very welcome. Contact Tara 0419 824 974, taracameron@gmail.com

WHOOPS!!!

Members who received a hard copy of May Hut News must have wondered what was going on with Brian Marshall's article (Part 2: Hydro-power: a passport to damnation?)

We can put the confusion down to a "production problem", blame the computer or simply admit that the editor messed up—sorry! A correct version is on pages 6-8 of this newsletter.

Members of the Society and supporters gathered in Springwood on 5th May 2012 to protest against the threats mining companies are presenting to the Gardens of Stone reserve proposal area. Everyone enjoyed hearing songs from the Ecopella choir and speakers from the Greens, the ALP and the Colong Foundation for Wilderness. Local MP for the Blue Mountains, Roza Sage, was absent. Coalpac Pty Ltd's 'Coalpac Consolidation Project' and Enhance Place Pty Ltd's 'Pinedale Coal Mine Extension Stage 2' both seek to open-cut mine large parts of the Ben Bullen State Forest. The forest lies within a 40,000 hectare proposal area environment groups are campaigning to have protected.

On 26 April Society members joined Cullen Bullen residents in the main street of Cullen Bullen to hand State Member for Bathurst Paul Toole a petition. This evidences that the majority oppose Coalpac's proposal to encircle Cullen Bullen with an open-cut and highwall mine and rip-up 843hectares of habitat for hundreds of native plant and animal species.

On 1st May we joined thousands of people from across New South Wales and rallied outside Parliament House, demonstrating the strength of community concern about the destruction of rivers, forests and farmland and pollution of air and water by the rapidly expanding mining and coal seam gas industry. (Photo: Springwood rally on 5th May 2012)

Nursery News

Nursery Closure: We have now closed for sales at Lawson and at the Markets over June and July but will re-open on Wednesday 8th August at Lawson and the market sales will resume on the first Sunday (Blackheath) and 3rd Sunday (Lawson) in August. We have sown lots of seeds and prepared many cuttings which, with the aid of the heated beds in our glass-house, will produce lots of seedlings and cuttings for potting when our volunteers return.

Volunteer of the Month: No, not a plant this time, but we could not pass this month without honouring our oldest volunteer, Imre Gahl, who turned 90 on the 10th May. Imre and his wife Joan first became nursery volunteers in 1992 and are still inspirationally active. Imre is a former President of the Society and, until recently, played the viola with the Orpheus Strings. His persistent and patient weeding keeps our plants looking healthy and his sagacious knowledge on numerous topics, notably religion, politics and music, on which he has quite strong views, keep us entertained and informed. We celebrated his birthday at the Blackheath nursery on the Tuesday before his birthday with the traditional cake and champagne and on the actual day with a luncheon at the Grandview Hotel in Wentworth Falls. We are now looking forward to a similar celebration in the near future for Joan. We love them both. Kevin Bell, Nursery Manager.

Welcome to new members

Jeanette Robertson, Wentworth Falls
 Alan Foster, Wentworth Falls
 Noelene Kelly, Wentworth Falls
 Anna Ingham, Blackheath
 Francoise Pierre, Blackheath
 Peter Locke, Blackheath

Time for O'Farrell Government to think again: Promised CSG and Mining Reform must be delivered!

On Tuesday 1st May thousands marched on NSW Parliament House to protest the government's failure to deliver on its key election promises to protect critical agricultural and environmental assets from the rapid expansion of CSG and mining in NSW, and to bring *certainty* about land and water use to NSW communities. The rally was not only big, its participants were diverse. There were farming families from all over NSW, there were environmental groups from city and country, there were country town councillors and community representatives, even the Country Women's Association (CWA) of NSW was there in force.

The next day, a news release on the CWA web site said:

"For the first time in their 90 year history members of the Country Women's Association of NSW rallied outside NSW Parliament House yesterday. They joined thousands of farmers and concerned citizens to protest the state government's draft Regional Land Use Plans which neither protect prime agricultural land, nor require proper assessments for Coal Seam Gas exploration."

In a recent communication to its supporters the Nature Conservation Council (NCC) of NSW summarised the NSW government's failure to deliver on its election promises thus:

"They promised to introduce strategic regional land use plans that would identify 'sensitive areas' that would be off limits to mining and coal seam gas.

They promised to protect strategic agricultural land and areas of high conservation value.

To date, they have comprehensively failed to deliver on that promise.

The draft land use plans recently released by the NSW Government do not place a single square inch of the state off limits to mining and coal seam gas.

The draft land use plans fail to provide certainty for local communities, and do not provide clear legal protection for water, wildlife and natural areas."

The NSW Farmers Association (NSWFA) are so aggrieved at the government's breach of good faith that they are running the "Protect our Land and Water" campaign from their own web site. They even include a rolling list of broken promises and false claims by O'Farrell government ministers (see: http://www.nswfarmers.org.au/srlup1/what_was_promised).

The NSWFA also provides assessments of the draft Strategic Regional Land Use Plans (SRLUPs) and draft Aquifer Interference Policy (AIP). The following are the NSWFA's own tabulations of *promise versus delivery*. The original tables with full supporting commentary can be found at: http://www.nswfarmers.org.au/srlup1/what_is_proposed

	Promised	Delivered
<i>Exclusion zones where mining and coal seam gas activities cannot occur</i>	✓	✗
<i>Upfront assessment, before exploration licences are granted</i>	✓	✗
<i>Certainty for the community, agriculture, and extractive industries</i>	✓	✗
<i>Protection for strategic agricultural land</i>	✓	✗

Table 1: NSWFA's SRLUP Assessment

	Promised	Delivered
<i>Independent assessment of water impacts</i>	✓	✗
<i>Application to all coal seam gas groundwater interference</i>	✓	✗
<i>Protection for ALL water resources</i>	✓	✗

Table 2: NSWFA's AIP Assessment

The consensus expressed by the organisations above is echoed by Rivers SOS, Total Environment Centre, Sydney Food Fairness Alliance, Lock the Gate, and many others. If the Liberal-National Party coalition government is to salvage any credibility it must act swiftly to deliver the program of protection and planning reform it originally promised the NSW electorate.

Craig Linn, BMCS Project Officer (Food & Environment)

CSG & Mining Questions to the Member for Blue Mountains, Mrs Roza Sage

The above article examined the NSW Government's promise/delivery mismatch on CSG and mining in NSW. By way of balance the Society asked our local member Mrs Roza Sage a number of specific questions to find out what she personally has been doing and where she stands at the local level in relation to CSG and mining. However, rather than specific answers we received a more general letter commenting on only some of the issues. In our opinion most of the questions have either not been answered at all or not answered effectively, but beyond this comment we leave appraisal up to the reader. Please take time to thoroughly read the important questions asked, and then carefully consider Mrs Sage's response.

Questions to Mrs Sage from BMCS:

1) AGL holds a CSG exploration licence (PEL 2) that covers much of the lower Blue Mountains, from Valley Heights down. Though technically this licence expired last year it is still deemed current with AGL having applied for renewal. AGL is already operating production CSG wells in the Camden area.

1a What actions have you taken to assess the level of threat posed to mountain townships by potential CSG drilling operations (e.g. correspondence with DPI, AGL, etc; visiting communities elsewhere that already have first hand experience with CSG exploration and production)?

Continued on page 5.

Questions to Mrs Sage (continued from page 4)

1b Are you prepared to advocate on behalf of mountain townships to have them and surrounding lands excised from the current exploration area (PEL 2) and excluded from any future exploration or production areas?

2) As Member for Blue Mountains you necessarily shoulder a measure of responsibility to ensure the protection of the Greater Blue Mountains World Heritage Area comprising seven National Parks and one Conservation Reserve. In the east, immediately adjacent to Blue Mountains NP (in the Burragorang region) Apex Energy holds a CSG exploration licence (PEL454); in the north between Wollemi and Yengo NPs Macquarie Energy (a subsidiary of Dart Energy) holds PEL460 (the renewal of which has been applied for); and in the west the Coalpac open-cut mining proposal threatens a section of the Gardens of Stone currently proposed for conservation (GOS2).

2a What specific actions have you taken to assess the level of threat posed to our WHA National Parks by CSG and mining operations (e.g. site visits, commissioning of independent assessments, community consultations)?

2b What actions do you intend to take to protect these areas (e.g. pushing for significant buffer zones around NPs, actively supporting the GOS2 proposal)?

3) The draft Strategic Regional Land Use Plans and draft Aquifer Interference Policy, intended to address the rapid expansion of CSG and mining in NSW, have met with severe criticism from farming, community, and environmental organisations. These drafts are currently being reassessed in the light of public submissions.

In the context of the above local issues (Q1 & Q2), what improvements to these draft plans and policy do you personally advocate?

Full Text of Mrs Sage's Response:

"Thank you for giving me the opportunity to write about what I and the NSW Government have done in regard to the coal seam gas industry since forming office in March 2011.

Since being elected I have received a number of enquiries regarding the future of the coal seam gas industry in NSW.

I have made a number of representations to the Minister for Resources and Energy and he has assured me, and the community-at-large, that the Government remains committed to the protection of our land, our water and our environment.

The former Labor Government approved and renewed exploration licences with no community awareness or concern for agricultural or environmental impacts.

44 CSG exploration or production licences were approved during the 16 years of the former Labor Government and 6 petroleum exploration licences were granted and 10 PELs were renewed during the period John Robertson was a Minister in the former Government (Dec 09 - March 11).

The NSW Government has not granted or renewed one

single exploration licence since the election as it works to implement new controls regulating CSG exploration.

Since the beginning of this year, 20% of the State's gas usage has been supplied by coal seam gas from Queensland via the Moomba to Sydney pipeline and AGL's Camden operations.

While the Camden facility – in operation since 2004 - is currently producing 7% of NSW gas needs, we remain heavily dependent upon declining import reserves.

The NSW Government has received a number of submissions on its Strategic Land Use Policy from all stakeholders – including the CSG industry.

The community has expressed a number of concerns about the handling of this issue under Labor and we will continue to undertake a rigorous program of community consultation to arrive at the right balance that represents the interests of all stakeholders.

PEL 2 was first granted in the early 1990s. In accordance with section 20 of the Petroleum (Onshore) Act 1991, the licence remains in force until the renewal application is dealt with.

Exploration and mining in National Parks is unlawful under the National Parks and Wildlife Act. As the Member for the Blue Mountains I take great pride in the fact that the electorate of the Blue Mountains is surrounded by the World Heritage area.

The protection given to the National Parks is of great importance to not only myself but also for the Blue Mountains community. During my time as Member for Blue Mountains I will always take this responsibility with the utmost importance.

Yours sincerely Roza Sage MP Member for Blue Mountains"

Important Note from BMCS on Protection afforded National Parks

In her response Mrs Sage emphasised the protection afforded National Parks. We all value this protection, and it is indeed strong, but it is important to recognise that this protection is not absolute and can be altered. The NSW NP&W Act Section 41 actually states that "It is unlawful to prospect or mine for minerals in a national park or historic site, except as expressly authorised by an Act of Parliament." In the same section it also states "The Minister may, subject to such terms and conditions as the Minister may determine from time to time, approve of prospecting for minerals being carried out on behalf of the Government in a national park", and so the slippery slope begins. For our NPs to be really safe constant vigilance and ongoing active protection are necessary, not just by conservation groups but also by local members. Further, real protection necessarily means vigilance in regard to the lands immediately abutting our NPs. We have already seen, in Aug/Sept 2011, the NSW government allowing exploratory CSG drilling in very close proximity to Wollemi NP in the Putty area. In this age of fracking, horizontal drilling, and long wall mining, repercussions can travel far - as such significant buffer zones around our NPs are not a luxury they are a necessity.

Craig Linn, Tara Cameron, and Lachlan Garland, Blue Mountains Conservation Society.

Part 2: Hydro-power: a passport to damnation? Brian Marshall

Part 1 was in the April edition of Hut News.

In Part 1, I used the Three Gorges Dam (TGD) to show that 'saving' GGE by hydro-power supplanting a fossil-fuel source is 'green-wash' because the 'saving' is dwarfed by disproportionately larger increases in fossil-fuel power and ballooning GGE-production.

The TGD is just the tip of the iceberg! At 22,500 MW capacity, the TGD is dwarfed by the 13-dam cascade¹ (>70,000 MW) on the Jinsha River (the Upper Yangtse), and the Motuo Dam (38,000 MW) on the Yarlung Tsangpo River (Tibet), which is named the Brahmaputra in India. Of similar scale are the 13-dam cascade (~21,300 MW) on the Nu River, known as the Salween in Burma, and the 8-dam cascade (~15,550 MW) on the Lancang River which becomes the Mekong in Laos². The latter two rivers, plus the Upper Yangtse pass through the Three Rivers World Heritage Area in their descent from the Tibetan Plateau into south-west China's Yunnan Province. All such impoundments impose extreme social, environmental, heritage and economic costs.

Rampant hydro-dam construction now characterises most developing countries, whereas most hydro-dam infrastructure in developed countries was completed in the first half of the twentieth century. Environmental organisations in developed countries are more attuned to the consequent social, archaeological and environmental damage than those in underdeveloped regions: the former, having long benefitted from developed hydro-resources, are accused of selfishly denying the advancement of underdeveloped peoples; the latter are castigated as indigenous 'nimbyists' opposing the entitlements of the ethnically different population. Economic growth is paramount.

In South America, the hydro-dam explosion is termed the "blue gold rush". The Amazon Basin hosts 60% of the planet's remaining tropical rainforests and has unparalleled biodiversity. At least 60 large dams are planned for the Brazilian Amazon, while the neighbouring countries plan to dam many of the 'feeder' rivers. The proposed Belo Monte Dam on the Xingu River (a tributary in the Lower Amazon Basin) could become the world's third largest hydro-electric plant (11,233 MW)³. Outside the Basin, the Itaipu Dam on the Parana River between Paraguay and Brazil has the World's second largest capacity (14,000 MW) and is first in terms of maximum annual production (94.7 TW-hours).

Hydro-dams abound (~200) in the underdeveloped countries of sub-Saharan Africa. Of these, the Grand Inga single dam in the African Congo will have a capacity of 39,000 MW. It will dwarf the TGD and is of similar size to the Chinese Motuo Dam. The environmental and social consequences are substantial, despite the dams being constructed to support mining and industrial development, and to enhance the standard-of-living of the local people. Unfortunately, any 'trickle-down' effect is robbed by corruption such that any flows-on to the poor become the sparsest of drips!

Why should large amounts of renewable hydro-power be contentious? First, most of the world's major rivers now have existing and planned hydro-dam complexes to the detriment of natural ecosystems. Second, the rivers on which hydro-power depends only comprise 0.00018% of the world's 'fresh water', and are particularly susceptible

to climate change impacts. Third, the global ratio of coal-fired power to hydro-power is ~10:1; it is exponentially increasing along with **total** energy production and GGE⁴. And last, **the cumulative outcome is environmentally unsustainable and effectively suicidal** – fossil fuels are finite, population growth and lifestyle advancement create ever-increasing energy demands and GGE-production, yet climate-change mitigation demands less GGE-production.

To recapitulate!

- Demand for power-supply is driven by an increasingly unsustainable world population and the absurd notion of limitless economic growth.
- Hydro-power is a small renewable part of the power-source spectrum – claiming it 'saves' GGE when fossil-fuel (oil, coal, gas) power is growing at a much faster rate is specious.
- Dam and power-plant construction, the relocation of people, businesses and heritage to 'green-field' sites, and destruction of forests in the reservoir and 'green-field' areas all increase GGE.
- The adverse social, cultural and environmental impacts of dam construction are treated as collateral damage – the supposedly 'greater good' prevails, so let's hope the indigenous peoples and decaying ecosystems appreciate it!
- Governments, multinationals, big business and, at least in democracies, unashamedly self-interested voters determine the 'greater good'. Is this 'market forces', or the ethos of corporate greed, or do they differ? Do you trust the process or are we rushing lemming-like towards 'damnation'?

Hydro-power is a minor component of an energy spectrum dominated by fossil fuels. Because it is renewable (subject to climate change), it looms disproportionately large in the battle to preserve non-human species in the face of humanity's destructive capacity. Figures 1 and 2 are an attempt to show the possible trends of energy resources through to 2100. In both Figures and their source material⁵ there is a substantial energy deficit due to the progressive exhaustion of fossil-fuel resources. This has major implications for the global population and its standard-of-living.

The World's population currently exceeds 7 billion and could reach 9 billion by 2050 and 10 billion by 2100⁶. These predictions largely reflect life-expectancy and fertility rates. They effectively disregard the availability of energy resources to support such a population and its cumulative aspirations. Yet regardless of their current standards-of-living, all societies want standard-of-living improvements, and this has implications for food and water supplies, energy requirements, GGE, and climate change.

There are two end-member ways of reconciling the growing population and energy requirements: either energy resources must be expanded to meet total demand, or the world's population must be reduced. The former boosts GGE-production; the latter should counter it. Those who believe in humanity's ingenuity argue that energy supply must be expanded to meet population increases and promote economic growth, so I will firstly examine this end-member. (continued on page 7)

Part 2: Hydro-power: a passport to damnation?
(continued from page 6)

For the population of ~3.3 billion in 1965, the average energy consumption expressed as tonnes of oil equivalent (**toe**) per person per year is ~1.2 (Fig. 2). From 2007 to 2011, the population rose from 6.6 to 7+ billion at an average consumption of ~1.7 **toe**, signifying an improved standard-of-living and increased GGE; but whereas China, India, Pakistan and Bangladesh (some 2.7 billion people) collectively averaged 0.8 **toe**, the North American consumption was about 8.0⁵ – much is hidden within an average! If a 1.7 **toe** is applied to populations of 9 and 10 billion for 2050 and 2100 respectively, the total energy requirements are 15,300 and 17,000 Mtoe per year, amounting to increases over today's value (~11,800 Mtoe) of approximately 30% and 44%. **Yet these are minimum increases, because developed countries would hope to at least retain their standards-of-living, and developing countries would expect to radically improve theirs.** For example, the **2050** energy requirements for a not unreasonable range of 2-2.5 **toe** per person per year would be 18,000-22,500 Mtoe per year. It is totally unclear how such vast increases in the World's energy production could be achieved given the finite nature of fossil fuels, the lead times needed for today's nuclear plants (let alone those using technologies which have yet to attain commercial production), and the limited residual hydro-power capacity.

There are of course other (non-hydro) renewables. Mark Diesendorf⁷ states that Australia and certain developed countries could obtain 80-100% of their needs from a spectrum of renewable sources (including hydro) by 2050. However, this claim is made within the context of transitioning from existing fossil-fuel dependency whilst maintaining 'business-as-usual'. Whether renewables can meet the energy requirements arising from global-population increases and standard-of-living aspirations is contentious, but remains an admirable objective in a World where economic growth and GGE-reduction are currently opposed.

The other end-member involves declining energy supplies driving 'involuntary' population reductions. Chefurka⁶ uses an increasing energy deficit to show that the World's population will inevitably decay to less than 2 billion people, thereby resulting in an average energy consumption of ~1 **toe** per person per year. He believes the massive population losses would arise from famine, exposure to heat and cold, rampant diseases due to a loss of urban medical and sanitation services, and wars on a range of scales over scarce resources and 'have'/'have not' disparities. The massive death-rates needed for the 'overpopulation' to reduce to levels compatible with the declining resource-base would surely threaten the fabric of civilization. This is very much a doomsday scenario.

In Figures 1 and 2, I have modified Chefurka's graphs⁶ by considering the role of CSG, increasing the contributions from other renewables and hydro, and allowing a bigger contribution from nuclear sources in the latter half of the century⁸. The net result is that there will be a total energy decline, but it will be less abrupt and result in a lesser deficit. This will correspondingly lessen the impact on population levels and the social fabric, as communities adjust to perhaps 1.3 **toe** per person per year. There will still be economic contraction, massive

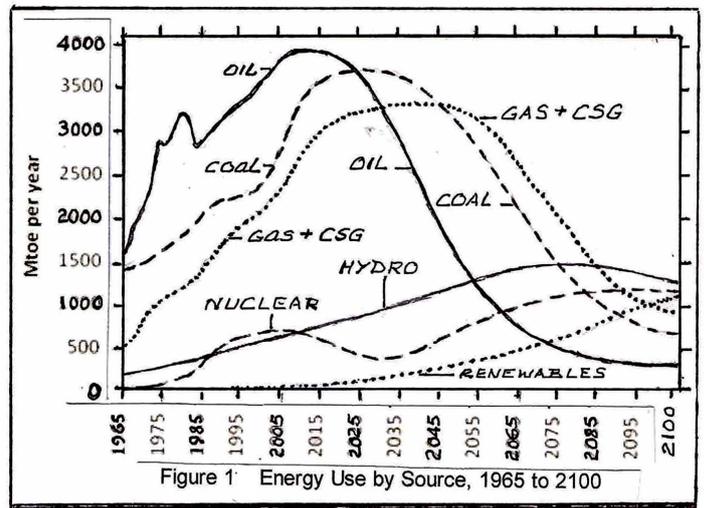


Figure 1 Energy Use by Source, 1965 to 2100

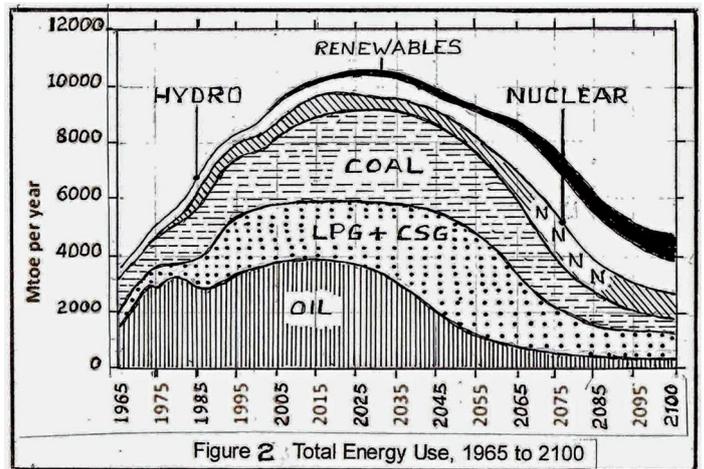


Figure 2 Total Energy Use, 1965 to 2100

unemployment, and a reduction of services such that disparities between 'haves' and 'have nots' will be exacerbated at all scales. Perhaps not totally doomsday, but major depression, deprivation and death will occur. The good news is that GGE will be reduced!

Between the above end-member situations lies a more realistic answer. Renewables (including hydro) must be phased in to progressively replace **all** fossil-fuel and nuclear energy forms, the transition must be used to actively curtail total energy consumption through reduction-targets, pricing policies and other efficiencies, energy consumption per capita must be reduced in developed countries and communities to lessen 'have'/'have not' disparities, population-control must be addressed by governments and individuals, and the unsustainable growth paradigm must be put back in its box and the lid nailed down!

In summary:

- Hydro-dams are an important part of a commitment to renewable energy sources; they must not be an adjunct to energy policies driven by over-population and unsustainable economic growth.
- If you believe that the World is over-populated and obsessed with unsustainable economic growth using finite natural resources, that this is driving GGE and climate change, and this will have catastrophic environmental consequences, then your position should be clear: developed and developing countries are compromising the World's future, and hydro-dams are a component of the environmental desecration linked to a growth-driven energy-spectrum.

(continued on page 8)

Part 2: Hydro-power: a passport to damnation?

(continued from page 7)

- If you conversely believe that humanity's ingenuity will enable unfettered economic growth, accommodate population growth, and 'deal with' climate change (or deny it), then your position should equally be clear: developed and developing countries must exploit all forms of power generation as they hurtle towards a utopian society – or perhaps oblivion!
- If you alternatively believe that the economic-growth paradigm is embedded in 'our' psyche, the developing countries are entitled to seek the developed economies' standards-of-living, and the adverse impacts of 'our' standards-of-living must be handled through mitigation/adaptation, then your position is the *status quo*: market-based 'carbon pricing' will supposedly reduce GGE, and developing countries are urged to supplant fossil-fuel energy with renewable sources (including hydro); but governments procrastinate and none of it must hurt!

And finally: if we follow the *status quo*, is it logical to use a market-based approach to resolve the very problem which the market and its unsustainable growth paradigm created?

¹ Dam cascades are particularly important where the river gradient is relatively steep (compared to a mature gradient) in that the profile lends itself to many smaller dams at less cost than a massive major dam with a high wall and a disproportionately small reservoir. Nevertheless, dam cascades are susceptible to the 'domino' effect – if the one at the top fails the water surge can progressively destroy all those downstream.

² The extent of these dams and their impacts on river systems are best conveyed by maps and longitudinal sections; these were shown at the Monthly Meeting but are unsuited to reproduction in terms of space and quality in Hut News.

³ This relates to the current Wikipedia list [http://en.wikipedia.org/wiki/List_of_largest_hydroelectric_power_stations] but as various planned dams are completed the order will evolve!

⁴ From 2004 to 2008 energy production and GGE both increased by 10% while population increased by 5%; the demands of population- and economic-growth clearly drive power production and GGE.

⁵ The figure is modified from *World Energy and Population Trends to 2100* by Paul Chefurka – for information on the derivation of this and his other projections, including sources and assumptions, go to <http://www.paulchefurka.ca/WEAP/WEAP.html>

⁶ This is based on the median fertility variant – see http://esa.un.org/unpd/wpp/Analytical-Figures/html/fig_1.htm

⁷ Mark Diesendorf, *One hundred per cent renewable electricity for Australia*, Hut News No 291, April 2012, p11.

⁸ These changes are speculative and reflect my 'guesstimates' rather than soundly based research.



NSW NEEDS A PLANNING SYSTEM THAT PROTECTS THE ENVIRONMENT AND OUR COMMUNITIES: Cerin Loane, Planning Policy Officer, Nature Conservation Council of NSW

In July 2011, the NSW Government announced an independent review of the NSW planning system. For the first time since it was introduced in 1979 the *Environmental Planning and Assessment Act* (EP&A Act) is being rewritten in its entirety.

In response to the review, developers and mining companies are lobbying to weaken essential environmental protections and public participation rights in the planning system in order to get fast-tracked development approvals.

The natural environment - our bushland, coasts, forests and rivers – is under very real threat. Long term strategic planning and robust environmental assessment is needed to keep our air and water clean and safe, and protect the health and wellbeing of local communities.

It is important that the community stands up to defend hard won environmental protections and community rights or we may see developers and mining companies get their way. We need to take action to ensure that the Government delivers on its election promise to protect the environment and put the community back into planning.

To assist its members and supporters, NCC has activated an online action so supporters can send a letter to Premier Barry O'Farrell and Planning Minister Brad Hazzard calling for a planning system that protects the environment and our communities. The NCC planning campaign website <http://nccnsw.org.au/content/take-action-new-south-wales-needs-planning-system-protects-environment-and-our-communities> provides further information for supporters including a template letter that people can use to contact their local MP. Please consider writing to your local MP to request a meeting and to seek their commitment in ensuring that the NSW Government delivers a planning system that protects the environment and our communities.

After nine months of consultation and research the independent panel consisting of Mr Tim Moore and Mr Ron Dyer are due to release their Green Paper by the end of May 2012. The Green Paper will set out the panel's recommended structure for a new planning system. The Government intends to introduce draft legislation into Parliament later this year.

Keep informed of the planning review process by signing up to NCC's fortnightly newsletter, NatureNews Online.

If you have any questions, or would like further assistance, please do not hesitate to contact Cerin Loane, NCC Planning Policy Officer on 9516 1488 or policy@nccnsw.org.au

BLUE MOUNTAINS CONSERVATION SOCIETY
'Like' us on Facebook: Blue Mountains Conservation Society
Follow us on Twitter: [bmcsnsw](https://twitter.com/bmcsnsw)

Loose Feathers, with Carol Probet



You can hear them coming from the other side of the valley. The plaintive squealing and wailing calls carry across the landscape and announce the approach of a flock of Yellow-tailed Black-Cockatoos. Suddenly the sky is filled with these majestic exhibitionists. The sound is exhilarating.

Yellow-tailed Black-Cockatoos are unmistakable in flight, with their slow, deep graceful wingbeats and long tails trailing. They fly with tail folded so the yellow panels are not normally visible - until the bird spreads its tail to turn or land, when the yellow becomes obvious. They have a yellow cheek patch, which

is brighter in the female. You can also pick the females by the pale bill, easily visible in flight. The male has a dark bill and a pink eye-ringing. And the one making a continual rasping call is a juvenile.

For much of the year you'll see them in small family groups, but as winter approaches they join together to form large flocks, at times more than 100 birds in places where there is a good supply of their favoured foods. You can sometimes see large winter flocks on Kings Tableland or in the pine forests of Jenolan and Newnes Plateau. But they are not limited to the mountains - recently a flock of 200 was seen in Centennial Park, Sydney.

Their fondness for pine cones is well known. They are one of the few species which appear to have benefited from these introduced trees. But have they *really* benefited? In contrast to pine forests, native bush provides an amazing variety of seeds from banksias, hakeas, leptospermum, etc, which supply a nutritious diet year-round. And eucalypt trees develop large hollows suitable for nesting, something which the pines don't provide. (Black-cockatoos require a nest hollow more than 30cm in diameter which may take over a hundred years to develop in a eucalyptus.) They are such long-lived birds that any failure to breed might not become apparent until it's too late.

Pair bonds are strong and a family (male, female and juvenile) will remain together within a larger flock. When feeding, big woody seed cones such as banksia are bitten off and held in the left foot like an ice cream cone, while the bird systematically tears it to pieces to obtain the seeds. They will also break branches off trees such as wattles, or excavate into the trunk, to extract huge wood-boring grubs inside. People who aren't aware of this habit will sometimes blame vandals or even wovies for the resulting destruction.

If any bird is evocative of the mountains, the Yellow-tailed Black-Cockatoo is surely one of the strongest contenders. It has long been the Society's logo, and what better logo could there be? Long may they grace our mountain skies!

Carol Probet, origma@westnet.com.au

*Photo: Yellow-tailed Black Cockatoo
Wayne Butterworth (Creative Commons)*

Membership Application Form

(Use capitals please—even for email address)

Name(s) 1.
2.
3.

Address:
.....PC

Phone(s)

Email

MEMBERSHIP FEES (please circle one item)

Single \$30 Concession (Senior/Student)\$20
Household \$35 Concession (Senior/Student)\$25
Corporate (open to negotiation) \$100

Bushwalkers only: (\$20 per walker per annum) \$.....

Donation (tax-deductible) \$.....

Send my copy of Hut News by
Please tick box mail internet only

TOTAL AMOUNT INCLUDED \$.....

Note: All fees include GST at the relevant rate.

Would you like to be involved in any of the following activities or working groups? (Please underline): Land use/development issues; Environmental Education; Threatened species issues; Web or database management; Plant nursery assistance; Bushcare; Publicity/photography; Water quality/sourcing studies; Society administration.

I/We agree to support the aims and objectives of the Society as set out on reverse side of this membership application:

Please sign if named above.

Signature(s) 1.
2.
3.

ENQUIRIES: Phone (02 4757 1872
Email: membership@bluemountains.org.au

Please cut out and forward this form with your cheque or money order to:
Blue Mountains Conservation Society Inc.
PO Box 29, Wentworth Falls NSW 2782
or pay online at www.bluemountains.org.au

Nature has the power to move people!

Jim Smith spoke at a BMCS meeting at Wentworth Falls in July 2011 and told stories of some of the remarkable things he has seen and heard at Wentworth Falls and beyond at a special time of the day—dusk. After the talk several people approached Jim with stories of their own about events that they had experienced while connecting with Nature. It was decided to follow up on this talk and let members tell THEIR stories at a meeting to be held later this year. It doesn't have to be anything spectacular. It can be something very small, but something that was special to you.

Contact Christine Davies 4787 7246 hutnews@bluemountains.org.au if you want to be part of this event. We need people to commit beforehand. Some people have already come forward, but we need more. Jim Smith will open up and host the forum. The rest will be up to YOU.

BLUE MOUNTAINS CONSERVATION SOCIETY

Blue Mountains Conservation Society is a community organisation working to achieve the preservation and regeneration of the natural environment of the Greater Blue Mountains.

The Society believes that World Heritage status provides an opportunity for local community members to become custodians of the unique biodiversity and scenery of the Blue Mountains.

The Mission of the Society is to help conserve the natural environment of the Blue Mountains.

The Aims and Objectives of the Society are to:

- Disseminate and foster an understanding of the ideals of Conservation.
- Promote the need for ecological sustainability.
- Protect the natural environment—flora, fauna, habitat, water, land and air.
- Actively oppose those human activities which degrade or destroy the natural environment.
- Repair the adverse effects of human activities upon the environment.
- Encourage the love of the natural environment by conducting a regular program of bushwalks.
- Increase the pool of expert knowledge about the natural environment, through meetings, excursions, research and other activities.
- Provide information to the public on matters of Conservation, especially through the Conservation Hut at the Valley of the Waters, Wentworth Falls.
- Maintain close and friendly relations with like-minded groups.

Down the Wallaby Track: a backward glance, with John Low

A HEAD FOR HEIGHTS

A hundred years ago next month a crowd assembled behind a beach in Atlantic City, New Jersey, expecting to witness the start of a thrilling adventure. They watched as a state-of-the-art dirigible rose into the early morning sky, make two wide circles above them and was beginning a third when its gas balloon suddenly collapsed and the two-decked gondola plummeted into a coastal swamp. All five crew were killed, their dream of an Atlantic crossing ending before it had begun. Thousands of miles away in Australia a small lookout on which the captain of this ill-fated expedition had stood nine years earlier and which now bore his name, quietly assumed the role of memorial.

Chester Melvin Vaniman (1866-1912) was born into a community of German immigrant farmers in Illinois. Though maintaining a life-long interest in agriculture he was to pursue a wide variety of interests, including music, acting, aviation and photography. His interest in the latter emerged during an opera company tour of the US and it was as a photographer, employed by the Oceanic Steamship Company, that he arrived in Sydney in February 1903. Panoramic photographs taken from high vantage points were his speciality and in Sydney, while trying to find a suitable position from which to capture the harbour, he began to experiment with a balloon he imported from America and tethered above North Sydney. It was a unique stage for a showman, keeping Vaniman in the public eye for almost eight months before a satisfactory photograph was taken and exhibited.

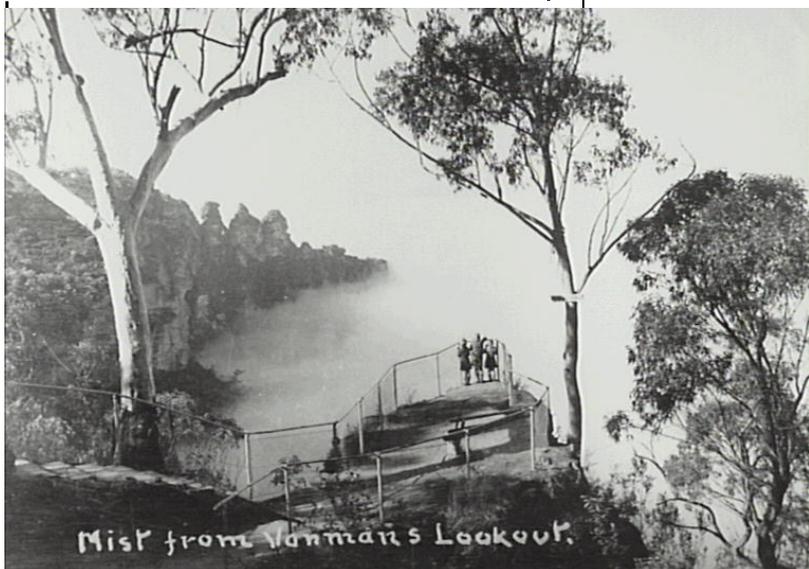
During these experiments Vaniman travelled to the Blue Mountains in November 1903 where he hailed the light as wonderful for photography. Again he attracted widespread curiosity when he erected an eighty foot (24m) pole in the small reserve then existing behind the Katoomba Courthouse. From a platform mounted at the top he took a photograph of the town and before returning to Sydney also carried his camera to a number of natural vantage points in the region. Within two years of his visit the small lookout from which he photographed Katoomba Falls and the Three Sisters was being referred to as Vanimans LO. It remains, possibly, the only 'geographic' commemoration of his name, certainly in Australia.

Vaniman's departure from Australia in mid 1904 effectively marked the end of his career as a photographer, his attention shifting to aviation when plans for further balloon photography in Europe came to naught. He built an aeroplane (which didn't fly) and began to interest himself in the design and commercial potential of dirigibles, participating in unsuccessful attempts to reach the North Pole (1907 & 1909) and to cross the Atlantic (1910). It was during his second attempt at an Atlantic crossing that he was killed. On 2 July you might like to wander down to his lookout and remember this tall, dapper, ginger-haired man whose remarkable panoramic photographs continue to delight those who view them.

John Low (johnlow@iprimus.com.au)

Note: Examples of Vaniman's photographs are held by the BM Historical Society, BMC Library's Local Studies Collection and NSW State Library. Also see Alan Tierney's *Melvin Vaniman (1866-1912): A Biographical Note* (Goulburn NSW, 2000).

(Photo from Blue Mountains City Council Library's Local Studies Collection.)



Clash of Eagles Christine Davies

On Friday 18th May I was surprised to see a White-breasted Sea Eagle in the Megalong Valley. We had lunch at the Megalong Tea Room and crossed the road to check for frogs in a sometimes swampy area. The Sea Eagle was soaring overhead. A magpie was attacking it from behind and looked very small in comparison. Then, out of the blue, a Wedge-tailed Eagle appeared. The Wedge-tail flew twice at the Sea Eagle and they seemed to almost collide. Then they separated. I didn't see where the Sea Eagle went, by this time it was hidden behind a tree. The Wedge-tailed Eagle, satisfied that it had chased the intruder off, made its leisurely way back towards the cliffs.

On enquiry, I'm told that White-breasted Sea Eagles can be found not only near the sea as their name suggests, but inland near large bodies of water, for example Lake Wallace near Wallarawang and along the Nepean River. Perhaps this eagle was on the move, looking for new territory. How privileged I felt to be able to observe the clash between these two mighty birds.

The Feathertail Fly, *Callipappus australis*



can be found in the bushland in May. You will see what looks like a tiny feather floating around but if you look closer you will see that it is an insect.

On a recent trip to the south coast via the Southern Highlands I came across one at Manning Lookout near Fitzroy Falls. It landed on a branch. On further investigation I observed that it was with another animal which

looked to be a completely different species. The male has a pair of wings and a body length of 10mm with bright white hairs at the abdomen. The female is wingless and much larger than the male, her body length 30-40 mm. *Callipappus australis* belongs to the Mealy Bug family *Margarodidae*.

While I was checking out the Feathertail Fly, a very large leech latched onto me. It travelled with me from the Southern Highlands to the South Coast and had a good feed. It was quite a beautiful creature, glossy black with patches of orange and as thick and as long as my little finger. It is a now resident in the garden of a Mollymook motel. Christine.

Reprieve for historic rail cutting

The current widening of the Great Western Highway at Lawson has involved re-routing the railway from south to north of Sydney Rock, replacing the old cutting with a new one to its north. Eugene Stockton and Chris Whiteman proposed that the old cutting should be left open and the Rock and the adjacent railway property be reserved as a heritage item on account of its considerable historical, geological and botanical interest.

Blue Mountains MP Roza Sage has announced (Blue Mountains Gazette 23/5/12) that RMS will alter its plans to fill the cutting. "The cutting will now only be filled as

needed to complete the highway widening and local street work," Mrs Sage said.

The RMS will conduct further geological and ecological assessments at the site, which includes stonework from the original 1867 railway line through the Blue Mountains as well as significant geological features. "The assessments have allowed the significance of the Lawson rail cutting to be evaluated and it has been decided not to backfill the eastern end of the railway cutting," said an RMS spokesperson.

Mrs Sage said the outcome was a "win for the community and an excellent example of the benefit of community consultation".

Should native wildlife be protected from cats and dogs?

Do you want to help reduce the impacts of cats and dogs upon our native wildlife?

The NSW Companion Animals Taskforce has released a discussion paper and survey seeking public comment. A conservationist perspective is needed on this issue – please do take the opportunity to fill in this survey.

The questions in the survey are worth taking seriously as there are good initiatives that will help reduce predation upon native wildlife, such as reducing numbers of unwanted cats and dogs, controlling the sale of pets, and community education programmes. What is not discussed is that social attitudes to pets also need to include responsibilities to protect wildlife.

There is a brief mention of cat predation, however the recommendation is to educate owners to keep cats in at night – but we all know, that this is not good enough. Cats hunt birds and reptiles when they are active during daylight hours.

Some comments that you might like to make are:

- Cats and dogs should NOT be sold in pet shops. The RSPCA, Council Pounds, Animal Welfare League can place homeless animals and provide responsible pet information to purchasers.
- Legislation is needed to keep cats on the owner's properties and/or indoors.
- Local councils need financial resources to employ more rangers to ensure compliance with regulations by pet owners.
- Yearly registration fees for cats and dogs are needed to provide accurate data to councils for planning, and to provide income to meet the costs of services e.g., off-leash areas for dogs, and the impounding of stray cats. General ratepayer revenue is needed for wildlife protection initiatives.
- Native wildlife representatives need to be involved in ongoing departmental meetings about managing companion animals e.g., NPWS, Nature Conservation Council, NSW Wildlife Council (currently pet welfare organisations dominate).

The discussion paper and the online survey are at www.dlg.nsw.gov.au/CATaskforce OR ring the Dept of Local Government 02 9289 4000 and ask for a survey form to be posted to you. *The deadline for comments is 1st July, 2012.*

Meredith Brownhill.

BLUE MOUNTAINS CONSERVATION SOCIETY BUSHWALKING ACTIVITIES

Membership of the bushwalking group is open to Society members. The BMCS Bushwalking Guide which explains the numbered grades can be found on the Society's website www.bluemountains.org.au or can be posted on request. For more information call Maurice Kerkham 4739 4942 email mauricekerkham@hotmail.com or write to PO Box 29, Wentworth Falls 2782. **Late changes to the program will be published on the website.**

SATURDAY WALKS: Usually a full day longer walk at a faster pace. Before attending ring the designated contact person or the Group Co-ordinator Jim Percy 4758 6009 or email jp34@tpg.com.au

- June 16 **Pinnacles track to Walford Walls.** Great views into the Grose Canyon. Leader Bob 4757 2694. Meet at Wentworth Falls Stockyard CP, 8am, or Gearins Hotel CP 8.30am. Approx 8 km. Grade 3. Katoomba/Mount Wilson maps.
- June 23 **Genowlan Point in the Muggi Murrumbidgee Reserve, Capertee Valley.** Walk through a sandstone cliff pass with rainforest, past a diamond mine to Point Hatteras. 300m ascent to even gradient on top. Leader **Meredith** 4782 4823. Meet Medlow Bath GWH at Hydro opp Station 8.30am. 8 kms. Grade 3. Glen Alice map.
- June 30 **Lawson Ridge to Jims Creek.** Spectacular views into Wentworth Creek at Urella Lookdown with a steep descent to Jims Creek and steep climb out of 150M each. Leader **Jim** 4758 6009. Meet Lawson Station CarPark Nth side 8:30am Approx 12 km, 40% off track. Grade 3. Katoomba map.
- July 7 **Mountain Lagoon, Gaspers Ridge to Mailes Ridge** to outstanding views to the Colo River, gentle walk out along an undulating ridge. Leader **Meredith** 4782 4823. Meet Katoomba Station Car Park Gearins Hotel 8:30am. 12 km. Grade 3. Mountain Lagoon map
- July 14 **Wollangambe River via Bell.** Lots of pagoda's and great views. Leader **Bob** 4757 2694. Meet Wentworth Falls Stockyard CarPark 8.30. 10 km, all on track. Grade 3. Wollangambe map.

Check the BMCS website (www.bluemountains.org.au) for updates.

MONDAY LEISURE WALKS: Short Day walks of 3-5 hours, suitable for walkers of an average fitness. Bring morning tea and lunch and adequate water. The Group Co-ordinator is Maurice Kerkham, 4739 4942, mauricekerkham@hotmail.com

- Jun 11 **Lapstone Zig Zag and Elizabeth Lookout.** Great views to Sydney. Meet Faulconbridge Station south side, 9.15am. Leader Ken 0425 450 200. Grade 3.
- Jun 18 **Cockatoo Island.** Historic island walk. Meet top of escalators, Central Station. Leader Narelle 4751 2467. Grade 1.
- Jun 25 **Abseiller's Track, Glenbrook.** Scramble to top, then great views. Meet Glenbrook Station commuter car park 9.30am. Car pool. Leader Ros 4733 3880. Grade 3.
- July 2 **Mount Blackheath.** Level walk to great views. Meet Blackheath Railway Station car park 9.45am. Car pool. Leader Maurice 4739 4942. Grade 1.
- July 9 **Porter's Pass.** Meet Blackheath Neighbourhood Centre 9.45 am. Grade 3. Leader Phil 4787 5560. Car pool.

THURSDAY PLEASURE WALKS: Walks of 2-3 hours conducted at a leisurely pace to suit walkers on the day. Bring morning tea, adequate water and lunch if noted. Group Co-ordinator is Beverley Thompson, 4757 2076,

- June 14 **Adeline Park and Falls, Faulconbridge.** Car pool. Take lunch. Meet Faulconbridge Station Car Park 10am. Leader Maurice 47394942. Grade 2.
- Jun 21 **Lyrebird Dell, Leura.** Some descents and ascents on good track. Car pool. Take lunch. Meet Cnr Mall and Megalong St Leura 10:30am. Leader Joan c/o 47572076. Grade 2.
- Jun 28 **Wilson's Glen, Woodford.** Leisurely walk to Gypsy Cave. Meet Woodford Station south side 10am. Leader Maurice 4739 4942. Grade 2.
- July 5 **Darwin's Walk.** Car shuffle to Falls Road. Take lunch. Meet Stockyard Car Park, Wentworth Falls Station 9:30am Beverley 47572076 Grade 2.
- July 12 **South Lawson Falls.** Waterfalls and bush track. Barbecue lunch in North Lawson Park. Bring meat and salad or dessert to share. Car pool Meet Lawson Bowling Club car park 10am. Leader Narelle 4751 2467. Grade 2.
- July 19 **Christmas in July, Alexander Hotel, Leura.** Details in July Hut News. Meet at the pub, 12 noon. Leader Beverley 4757 2076. Grade 1.

ECO-EXPO—OUR FUTURE IN THE MOUNTAINS, Sat 16 June 2012

Lawson Public School Hall:

9.30-11am Speakers' Forum: Haydn Washington, co-author of *Climate Change Denial: Head in the Sand*; Senator Lee Rhiannon; Alison Winn, Sustainability Coordinator, BM City Council **11-11.30 am** Morning Tea **11.30-1 pm** Interfaith Forum: "Climate Change, Inner Change: A Shift in Consciousness" **1-2 pm** Lunch (available at venue) **2-4 pm** Panel Session: "How Life in the Mountains Might Look in 2030", with Prof Stuart B. Hill. **4 pm** Close.

Mid Mountains Community Centre:

9.30 am-4pm Information Stalls **11.30 am-12.30 pm** Workshops (to be advised); Info "speed dating". Contact : info@ecoexpo.net.au.

BUSHCARE GROUP

The Valley of the Waters Bushcare Group meets on the second Saturday of each month, 9am till noon. Tools and gloves are available. Bring a drink, a snack and a hat. New members are always welcome.

Phone Karen 4757 1929.

The Greater Blue Mountains
World Heritage Experience
www.worldheritage.org.au