SUBMISSION TO THIRLMERE LAKES INQUIRY

1. Introduction – Rivers SOS

The Rivers SOS Alliance was formed in 2005 with the goal of protecting NSW’s river systems from permanent damage caused by coal mining and other extractive industries. We call for a safety zone of 1k between rivers and mining operations, to prevent cracking of river beds, and pollution of water resources.

Rivers SOS is now a network of over 45 groups around the state. We hold regular meetings around sites of interest in NSW. Our most recent meeting – our eleventh – was in Bylong. Prior to that we have met in Maitland, Stroud, Mudgee, Douglas Park, Wollongong, Muswellbrook, Dungog, Ourimbah, Toronto and Lithgow. In this way we overcome the tyranny of distance and build up a strong network of personal contacts with others having similar concerns.

We write numerous submissions and we organise delegations to visit Ministers and their advisors on mining issues. We hold public meetings. We present papers at conferences and speak at universities. We also organise fund raising events.

2. Rivers SOS’s Involvement in the Thirlmere Lakes

Two members of Rivers SOS’s committee (Julie Sheppard and Caroline Graham), and a number of Rivers SOS supporters, live near the Lakes and appreciated their beauty and accessibility, as did most local people including Wollondilly Shire’s Mayors and Councillors.

When it became apparent that the lakes were drying up, in spite of good rainfall after the drought broke in 2008, local concern grew and items about the disaster appeared in local media. Most locals believed that mining near the lakes at the end of the 1990s – early 2000s may have had something to do with the unprecedented water loss.

Locals were not convinced when Council received a letter from Frank Sartor’s office (20.6.2010) claiming that drought was to blame; nor when a later NSW Office of Water report repeated this mantra.

As the drought had broken in Warragamba Catchment, where the Lakes are located, in 2008, with dams refilling and environmental flows restored to rivers, it seemed obvious that other factors were preventing the Lakes from refilling. In fact they continued to dry out to this day.

Professor Philip Pells, in response to media reports, took an interest in this phenomenon and began to research the problem. His interest was not surprising given the decades of professional consultancies he has worked on in this area.

He provided a report on the Lower Cataract River’s mine damage, for a court case in 1998. He provided advice to the Tahmoor Community Consultative Committee on a preferred setback for longwall mining near the Bargo River Gorge, resulting in the mine moving plans back to protect the Gorge. His firm, Pells Consulting, was engaged to advise on means to mitigate damage to the Hume Highway near Douglas Park.
which was recently undermined by BHP. He has just been given a Premier’s Award for innovation for this work.

As it is believed that longwall mining out of Tahmoor Colliery is at least partly to blame for the water loss in the Lakes, it is not surprising that Professor Pells took a keen interest, given his previous work concerning there.

In this submission we want to emphasise that Rivers SOS did not commission Pells to carry out lengthy research on this issue. We were told by local MP Jai Rowell that Minister Robyn Parker believed this to be the case, and for this reason he may have been excluded from your committee of inquiry.

We have protested about this in a long letter to Minister Parker, and in a meeting with Alistair Henchman and others from the NPWS, and with Jai Rowell himself. As a group or as individuals we would be unable to fund such extensive professional research by an acknowledged mining expert like Pells. Also, he is first and foremost a conservative scientist who would not be swayed by one side or another in this whole debate, and to suggest that he could be bought is insulting.

We in Rivers SOS certainly wanted to assist him as far as possible. Together with other concerned locals we helped him to find people to interview, and to find historical photos of the lakes in order to flesh out the background and records of the lakes from the late nineteenth century.

As well as Pells’s exclusion from your committee, although to our certain knowledge he is the only well-qualified expert to have carried out such careful and lengthy research on the problem, we are also disappointed that the promised community representative has not been appointed (see attached - letter from Minister Parker, 10.10.11) We still have no reply to our strongly-worded response to this letter (Appendix A - letter to Min. Parker, 13.11.11)

Therefore we fear that this does not bode well for the production of a serious and objective report.

3. After the Pells Report

The Pells report makes it clear that mining is at least partly to blame for the drying up of the Lakes.

Rivers SOS continued to campaign for an independent inquiry and we amassed several hundred signatures on a petition to that effect, so were pleased when it was set up at last.

We continued to publicise Pells’s findings on radio and via local newspapers. Although nothing we can do will save the lakes we believe that publicity may help to mandate adequate setbacks from sensitive sites like the lakes in future.

Two events of interest occurred in recent months: Rivers SOS was contacted via our web site by a delegation of Chinese officials from Shaanxi province, where their rivers are in a worse state than ours because of mine damage. (See Appendix B)

Thanks to the Mayor and General Manager of Wollondilly Council, Rivers SOS was able to host the large delegation at Council chambers, and we briefed them there before taking them to view the dry lakes. This was our first physical international contact, although via email we network with groups in the USA and India.

We also succeeded in passing a motion at the AGM of the NSW Nature Conservation Council, supporting our call to contact the International Union for the Conservation of Nature, based in Geneva. This body is responsible for monitoring natural World Heritage sites (UNESCO monitors the built sites). Thirlmere Lakes were the jewel in the crown of the Greater Blue Mountains World Heritage Area, and their loss is thus all the more serious, warranting attention from this international and highly respected body.
After some correspondence, Rivers SOS was invited to speak on the Thirlmere Lakes at the November 2011 AGM of the Australian Committee of the IUCN. We were also asked to provide a leaflet on the subject (see Appendix C).

The outcome was that three motions were passed unanimously. The first called for an IUCN consultant to be engaged to monitor the Lakes and to report back to the Geneva HQ; the second called for a committee to be set up to monitor mining issues in all of the Greater Blue Mountains World Heritage area, and the third called for a representation to be made to the NSW Government.

Of course we will continue to take a keen interest in this disaster. As said above, insofar as mining is partly to blame, our aim is to publicise this tragedy as best we can so that future mining plans will be set back at a responsible distance from precious water resources.

As you have access to the technical details of Pells’s research we do not feel we need to enlarge on his expert analysis. As lay people our opinion on technical matters is superfluous. Suffice it to say that his report confirmed what we, and so many other locals, feared to be the truth.

Caroline Graham
Vice President

Julie Sheppard
Secretary

Rivers SOS

19.1.12
Dear Minister,

We in the Rivers SOS Alliance welcome your recent decision, announced on 25.10.11, to conduct an inquiry into the water loss in Thirlmere Lakes.

However we are writing to you now in the hope that you might consider including Dr Philip Pells in the inquiry’s committee.

We are concerned that a reason for his exclusion is the perception that his own recent report on the Lakes, 20.10.11, was commissioned by our Rivers SOS Alliance, as you mentioned in your letter to Jai Rowell, Member for Wollondilly on 10.10.11. Our group certainly could not afford to commission a professional of his standing to carry out this year-long research.

There are only two active members of Rivers SOS living near the Lakes– the undersigned – and when contacted by Dr Pells last year, along with many other local residents, we gave him assistance in, for example, obtaining historic photos of the Lakes and providing some contacts including former mine managers in the area. Others with a keen interest also gave assistance, including officers from Wollondilly Council and members of the Tahmoor Colliery Community Consultative Committee.

Of course we were pleased that someone of his standing was taking a proper interest, because we were witnessing the water levels sink week after week throughout 2010 up till now. We would not be involved in a group like Rivers SOS if the disappearance of our lakes were not a matter of concern.

But throughout his contacts with us and other local people, Dr Pells was consistent in his attitude: he would be entirely objective and scientific in his approach. In fact we had no idea of his findings until the report was finalised and we read his media release.

We therefore hope you understand that the rumour that he was commissioned by Rivers SOS, with the implication that his report is biased, is untrue and even libellous.

We have also heard through an informal channel that another reason for Dr Pells’s exclusion from your committee is his former criticism of the NSW Office of Water’s preliminary study of the water loss (20.12.10). We hope that this is merely conjecture; as if this were correct it would mean that scientific debate is being stifled in the interest of conformity and the stifling of possible dissent.

We write to you in some detail because we feel strongly that it is counterproductive to exclude the only scientist who has had long experience in research and professional employment in the area surrounding the Lakes, culminating in his year-long research into the water loss, aided by his personal assistant and his son, hydrogeologist Dr Steven Pells. This mammoth task was unpaid and we would have hoped that, in recognition both of this work and of his unique level of experience, he would have been a natural choice for the committee of the inquiry.
He is in a position to identify specific knowledge gaps that should be pursued further, and to introduce the committee to much research data and to those people who could aid the inquiry. The knowledge that he has accumulated should not be wasted: why re-invent the wheel?

In short, his exclusion is insulting on a number of grounds, and therefore we imagine that it is not likely that he will be co-operative, or make his research freely available under the circumstances.

We also note that in your letter dated 10.10.11 to Jai Rowell, Member for Wollondilly, in answer to our questions through him re the Inquiry, you say that "the panel will comprise a cross section of both scientific expertise and community representation to ensure a balanced and unbiased approach."

Where is the community representation on the committee?

Our major concern is that if Dr Pells is excluded and there is no community representation, the committee is in danger of being dismissed as an exercise in whitewashing issues affecting the Lakes, as the community will have no confidence that committee’s approach will indeed be “balanced and unbiased”.

We would appreciate your reply to our request as soon as possible, as we would think that the committee will be convening in the near future,

Yours sincerely,

Caroline Graham
Vice President

Julie Sheppard
Secretary
To whom it may concerned:

I'm Susan Jiang working with Australian Technical Experts Network (ATEN), housed in the university of Canberra and Beijing, our organization's main function is to coordinate visiting activities for the chinese delegation, for more detailed information, you are welcome to visit our website at www.aica.com.cn/eng/

Now there is a chinese delegation from Shaanxi Provincial Water and Soil Conservation Bureau, they have strong desire to learn some knowledges about Water and Soil Conservation and Ecological Construction, They will be in Sydney on Oct 25th, They wish to pay a visit to in the morning of Oct 27th. from 9:00-10:00 am. I wonder whether you can provide an brief introduction for this delegation. the group will be responsible for their accommodation and travel costs,

they are interested in the following topics
(1) How to protect the integrity of river systems and water sources, the factors which influence the river health, the positive measures and decrees to solve such problems

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<th>Name</th>
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<tr>
<td>Mr. Ma Lebin</td>
<td>Deputy Secretary, Shaanxi Provincial Water and Soil Conservation Bureau, P.R. China</td>
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<tr>
<td>Mr. Guo Xinmin</td>
<td>Consultant, Rivers and Reservoir Management Division of Shaanxi Provincial Department of Water Resources, P.R. China</td>
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<tr>
<td>Mr. Zhang Yinsheng</td>
<td>Deputy Division Chief, Shaanxi Provincial Management Station of Electromechanical Drainage and Irrigation, P.R. China</td>
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<td>Mr. Yang Minzhe</td>
<td>Deputy Director, Office of Shaanxi Provincial Flood Control and Drought Relief Headquarters, P.R. China</td>
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<td>Mr. Zhang Pu</td>
<td>Director, Hydrological Bureau of Shaanxi Province, P.R. China</td>
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<tr>
<td>Mr. He Jianmin</td>
<td>Deputy Director, Shaanxi Provincial Water and Soil Conservation and Ecotope Monitoring Center, P.R. China</td>
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<tr>
<td>Mr. Ming Daoyou</td>
<td>Director, Shaanxi Provincial Water and Soil Conservation and Ecotope Monitoring Center, P.R. China</td>
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<td>Mr. Yang Kangning</td>
<td>Chief Engineer, Shaanxi Provincial Water and Soil Conservation and Ecotope Monitoring Center, P.R. China</td>
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<td>Mr. Liu Tiehui</td>
<td>Director, Shaanxi Provincial Water and Soil Conservation Surveying and Planning Institute, P.R. China</td>
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<td>Deputy Chief Engineer, Rivers and Reservoir Management Bureau of Shaanxi Province, P.R. China</td>
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<td>Ms. Li Huimin</td>
<td>Division Chief, Rivers and Reservoir Management Bureau of Shaanxi Province, P.R. China</td>
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<td>Mr. Sun Runmin</td>
<td>Secretary, Shaanxi Provincial Hydropower Surveying and Designing Institute, P.R. China</td>
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<td>Mr. Tong Yinglong</td>
<td>Secretary, Management Bureau of Jinghui Canal, Shaanxi Province, P.R. China</td>
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<td>Mr. Lu Zicheng</td>
<td>Consultant, Leader Group Office of Shaanxi Immigrant of Repository Area, P.R. China</td>
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For any questions, please feel free to contact me via susan.jiang@et.com.au or 0061 02 9575 4859, I understand this may be a short notice but appreciate your response.

I look forward to hearing from you.

Best Regards

Susan Jian
APPENDIX C

20.11.2011: The Loss of Thirlmere Lakes

The Lakes: The five lakes of Thirlmere Lakes National Park (gazetted in 1974) lie in the Warragamba Catchment (Schedule 2 Special Area, Sydney Catchment Authority), 90 km south west of Sydney. They are in the south west Colong section of the World Heritage listed Greater Blue Mountains National Park (listed in 2000).

They were almost entirely ground water fed. They were said to be at least 15 million years old (Bishop et al. 1982), and were “an outdoor laboratory of considerable significance.”(NPWS Plan of Management, 1997). Their great age and previous stability enabled many aquatic organisms to evolve in isolation, some of which were restricted or almost restricted to this one lake system. These included a freshwater sponge, *Radiospongilla sceptroides*, thought to be found only within the Warragamba catchment, and the rare relative of the water-lily, *Brasenia shreberi*.

The fringing wetlands also provided a habitat for numerous bird, mammal, frogs and reptilian species. The Australasian bittern, classified as vulnerable under the Threatened Species Conservation Act, has been recorded there, reliant on the densely vegetated wetland. The Japanese snipe, in danger of extinction, has also been recorded foraging in the muddy foreshores of the lakes.

Lake Werri Berri, pre-mining

For generations, since the railway came through in the 1860s, the beautiful lakes have been a destination for tourists; while generations of locals have camped and picnicked there, and canoed, kayaked, swum and water skied (until this was banned) on the three largest lakes. Their water was also used for irrigation, and for forty years a pump house pumped megalitres of water up to Couridjah Station to supply steam trains using the southern railway line.

In two of the three major droughts recorded in the past - the “Federation drought” and the World War 2 drought - the two largest lakes dried up but refilled after rain. The lakes started drying out again during the third major and most recent drought, but this time, after the drought ended in the Warragamba Catchment in 2008, the lakes did not recharge even with heavy rain, but continued to dry out. By 2010, locals who loved the lakes, including Rivers SOS members, raised the alarm – was recent coal mining partly to blame?

Mining and the Lakes: From 1996 to 2001 the Tahmoor Colliery extracted coal from a series of longwall (underground) panels near the lakes. Although the mines were just outside the National Park boundary,
they went to within 700m of the lakes. The mines were dewatered into the nearby Bargo River, a major tributary of the Nepean, causing high salinity in the river. The amount pumped out was considerable and seems to have varied between 2.5 and 4 megalitres per day. The lakes and the river are divided only by a low hill, and it seems that some of the groundwater which had previously fed the lakes was now being diverted and pumped into the river.

Inquiries and Campaigns: By mid-2011 all the lakes were completely dry. (The third largest, Lake Nerrigorang, had never dried out before according to local people, even in the past two severe droughts).

Rare species were now the victims of localised extinction (Rivers SOS asked for help with possible relocation from experts at the Royal Botanic Gardens and the University of Tasmania). Rivers SOS, Wollondilly Council, the local member for Wollondilly, Jai Rowell (Lib.) and others publicised the loss and called for an inquiry. Rivers SOS circulated a petition. The issue was raised often in local media; also on Channel 2 and in the Sydney Morning Herald.

Council was assured by Frank Sartor’s department that “DECCW has advised that low water levels ... are a natural phenomenon due to drought” (June 2010).

In October 2010, the AGM of the Nature Conservation Council of NSW unanimously supported a motion calling for the NSW Government to provide information on the impacts of longwall mining and for the IUCN to be alerted to the damage to this World Heritage site.

Dr Philip Pells, mining consultant with long experience in the Lakes region, embarked on his own independent study of the water loss.

In January 2011 the NSW Office of Water released a “preliminary study” stating that drought was the likely cause and that mining impacts “are unlikely to have a measurable impact on water levels.” Given that there had been three years of good rainfall, Rivers SOS was not convinced. The then Minister for Water, Phil Costa, promised us a further inquiry.

In August 2011 the World Heritage Australian Advisory Committee requested information from the Environment Minister Robyn Parker.
In October 2011 the peer-reviewed Pells report was released, claiming that the past drought did not fully explain the water loss, and that “mine dewatering is likely to have impacted on groundwater flow patterns adjacent to the lakes, including lowering of baseflow to the lakes.”

Then, in October 2011, Environment Minister Robyn Parker announced the promised inquiry into the water loss, to report by June 2012. This was welcome news except for the fact that Dr Philip Pells has not been included on the committee, in spite of his accumulated knowledge and research.

In summary, the destruction of the lakes through approval of longwall mining in their immediate vicinity represents much that is amiss: an operation based on insufficient research, sacrificing priceless assets in the process, while compounding the national record of extinction of native species, and leaving a local community to mourn the loss.

Rivers SOS hopes that by drawing attention to this loss, future governments might be more cautious, e.g. apply the precautionary principle, before approving mining operations in environmentally significant areas, especially when these are part of a World Heritage area. In NSW mining and coal seam gas extraction is expanding rapidly, with insufficient regulation and monitoring.

We therefore ask the IUCN to view the lost lakes and to make public comment, in order to inhibit further damage. This would affirm, inter alia, Article 6 of the World Heritage Convention, in which state parties undertake not to take any deliberate measures which might damage heritage sites. The longwall mines in question were approved before the Greater Blue Mountains area was listed, but at least their loss could provide an object lesson for the future.

Caroline Graham, Vice President, Rivers SOS
Lake Werri Berri, September 2011
Dear Mr. Rowell

Thank you for your recent representations on behalf of Ms Julie Sheppard of Rivers SOS regarding declining water levels at Thirlmere Lakes.

I would first like to commend Rivers SOS for their ongoing work to protect our precious waterways against the impacts of pollution.

Please inform Ms Sheppard that planning for the independent inquiry into the declining water levels at Thirlmere Lakes is underway. I am currently reviewing the terms of reference for the inquiry and would like to assure Mrs Sheppard that the panel will comprise a cross section of both scientific expertise and community representation to ensure a balanced and unbiased approach.

Furthermore, I understand that Rivers SOS have recently engaged Professor Phillip Pells to conduct an informal review of historical rain and lake level records at Thirlmere Lakes, to further investigate the declining water levels. This important work is supported by the National Parks and Wildlife Service (NPWS).

Should Ms Sheppard require further information regarding declining water levels at Thirlmere Lakes she may contact Mr Adrian Johnstone, Area Manager Nattai NPWS on 4640 0503.

I trust this information is of assistance.

Yours sincerely,

[Signature]

Robyn Parker MP
Minister for the Environment

Level 32, Governor Macquarie Tower, 1 Farrer Place, Sydney NSW 2000