**Objection to the Dendrobium Coal Mine Extension under Areas 5 and 6 (SSD 8194) beneath the Cordeaux and Avon Dam catchments within the Sydney Metropolitan Water Catchments.**

I wish to express my very strong objection to current and further expansion of underground long-wall coal mining within the Sydney Metropolitan Water Catchments (SMWC) and in particular into Areas 5 and 6 of the Dendrobium mine under the Cordeaux and Avon Dam catchments.

Objections

I object to the expansion of mining into these areas and within the SMWC at large on the following grounds :-

* 1. Long wall coal mining will cause land subsidence of over two metres resulting in the cracking of bedrock and consequent irreversible cracking and draining of creeks, rivers and upland swamps with the immediate and irreversible loss of the flora and fauna dependent on such habitats, many of which are rare and threatened, such as the Platypus, Water Rat, Swamp Rat, Large-footed Myotis Bat, Littlejohn’s Tree Frog, Giant Burrowing Frog, Red-crowned Toadlet, Southern Emu-Wren, Beautiful Firetail and potentially the Eastern Ground Parrot, Eastern Bristlebird, Giant Dragonfly and Long-nosed Potoroo.
	2. Many of the upland swamps are listed Endangered Ecological Communities (EEC’s) protected under Threatened Species legislation and should be protected. Department of Environment and Climate Change (DECC) (2007) identified Upland Swamps as *Priority Fauna Habitats* and identified the greatest threats to Upland Swamps as the Key Threatening Processes of *alteration to habitat following subsidence due to longwall mining* and the *ecological consequences of high- frequency fires.* Twenty seven Upland swamps will be destroyed if this mining expansion proceeds which is unacceptable.
	3. Loss of creeks, rivers, streams and swamps will remove vital and irreplaceable drought and fire refuges in the landscape for fauna and flora such as the Koala, Eastern Pygmy Possum, Southern Brown Bandicoot, kangaroos and wallabies, small mammals and many bird and reptile species. These are some of the few forests in eastern Australia that didn’t burnt in the 2019/2020 fires providing critical refuge for many species such as the Koala, flying foxes and birds as burnt forests take many years to recover.
	4. Loss of creeks, rivers and swamps will cause drying of the landscape and increase its flammability and vulnerability to wildfire with the expected complete loss of peat swamp substrates by fire and erosion and their irretrievable loss as upland swamp habitats, converting vegetation to much drier fire prone vegetation communities. This will direct detrimental impacts on stream flows and consequently flows into Avon and Cordeaux Dams.
	5. Land subsidence will cause the collapse of sandstone overhangs and caves which are commonly sites of significant Aboriginal Cultural Heritage and the habitat of the unique Sandstone Rock Warbler and Eastern Horseshoe Bat, and endangered Large-eared Pied Bat and Broad-headed Snake.
	6. Long-wall mining will come within 300 metres of the edges of the Avon and Cordeaux dams, and to within 1000m of the dam walls, threatening dam infrastructure, which is too great a risk.
	7. Water NSW are predicting a loss of “5.2 megalitres per day” of water loss caused by bedrock cracking to streams, creeks, upland swamps and aquifers which is “unacceptable” and which will continue in perpetuity. This is an unacceptable betrayal by government to the community when our drinking water supplies are threatened by climate change and ever increasing demand from population growth.
	8. The Sydney Metropolitan Water Catchments have some of the highest annual rainfall of all of Sydney’s water catchments and therefore provide some of the most reliable inflows to dams, should its creeks, rivers and swamps not be irretrievable damaged by underground coal mining.
	9. Current and continuing underground coal mining in the Sydney Metropolitan Water Catchments will lead to the input of highly toxic mine pollutants into creeks, rivers and aquifers in perpetuity and consequently into our drinking water, which is completely unacceptable.

Looking to the Future

I consider the DPIE have failed to seek alternatives to this proposal and seek to minimise damage to our irreplaceable Sydney Metropolitan Water Catchments by not:-

* 1. Identifying alternative coal sources outside the SMWC.
	2. Working to identify alternate power sources for the Blast Furnace.
	3. Working to reduce and phase out underground coal mining in the SMWC.
	4. In the interim, seeking to reduce and limit the impact of mining by utilising board and pillar extraction techniques which can drastically reduce subsidence impacts, until replacement energy sources can be identified.
	5. Working to identify new sustainable industries for the Illawarra region and in the interim provide alternative employment opportunities for displaced mine workers in ecological and landscape restoration, just as Job Seeker and Job Keeper have done in the current crisis.

Conclusion

Should Government proceed to allow the expansion of underground coal mining in our irreplaceable Sydney Metropolitan Water Catchments I would consider this a complete betrayal to the community and evidence that the Government is incapable of taking up the challenges of our time for the benefit of the community and future generations. A matter of out of sight out of mind.

References

DECC (2007) *Terrestrial Vertebrate Fauna of the Greater Southern Sydney Region: Vol 1 Background Report, Vol 2 Fauna of Conservation Concern including Priority Pest Species, Vol 4 Fauna of the Metropolitan, O’Hares and Woronora Special Areas.* A joint project between the Sydney Catchment Authority and the Department of Environment Change (NSW) (DECC) under the Special Areas Strategic Plan of Management by the Information and Assessment Section, Climate Change and Environmental Protection Branch, DECC, Hurstville.

<https://www.environment.nsw.gov.au/research-and-publications/publications-search/terrestrial-vertebrate-fauna-of-the-greater-southern-sydney-region-volume-1-background-report>

<https://www.environment.nsw.gov.au/research-and-publications/publications-search/terrestrial-vertebrate-fauna-of-the-greater-southern-sydney-region-volume-2>

<https://www.environment.nsw.gov.au/research-and-publications/publications-search/terrestrial-vertebrate-fauna-of-the-greater-southern-sydney-region-volume-4>

Yours sincerely,

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