

**Submission  
No 38**

**INQUIRY INTO BIODIVERSITY CONSERVATION  
AMENDMENT (BIODIVERSITY OFFSETS SCHEME) BILL  
2024**

**Name:** Cr Cath Blakey  
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Select Committee on Planning and Environment  
Parliament House Macquarie St SYDNEY NSW 2000  
Via email: [portfoliocommittee7@parliament.nsw.gov.au](mailto:portfoliocommittee7@parliament.nsw.gov.au)

Dear Committee,

Re: Biodiversity Conservation Amendment (Biodiversity Offsets Scheme) Bill 2024

Reforming the biodiversity offset scheme will fail to protect biodiversity. Offsets are not an appropriate method of biodiversity protection.

I am a resident of Wollongong, and from 2017-2024 I was a Wollongong City Councillor. A clear example of the problem with biodiversity offsetting can be found in the Wollongong Council area with the Dendrobium coal mine and the upland swamps it has destroyed. The UNSW water lab has recorded how Dendrobium coal mine has caused irreversible destruction of upland swamp by Dendrobium coal mine.<sup>1</sup> The use of upland swamps at Maddens Plains offsets fails to justify the destruction of biodiversity in the Sydney drinking water catchment Special Areas.

Peat swamps have very limited distribution, and require a high, perched water table to exist. They took over 15,000 years to form, and are being destroyed for the extraction coal for once off use. Dendrobium's longwalls reach as long as 2 kilometres, run more than 300 metres wide and as much as 4.5 metres high. When mine subsidence causes the underlying sandstone bedrock to crack, the water drains out of the peat and the peat dries out and is then highly flammable. This water is lost to the creeks which should be feeding water to the dams. Peat swamps aren't ecosystems which can be re-sealed or recreated through human intervention. From the Newnes Plateau it's well documented that once these peat swamps are dried they become vulnerable to bushfire, and once alight will burn and burn, causing ecological collapse. In a dried state the peat the rate of erosion and scouring also increases.

The Illawarra upland swamps are critical habitat for the endangered giant dragonfly *Petalura gigantea*, a slow breeder, which spends it's the 6-10 years of it's larval life stage underground burrowing in the waterlogged, peaty soil of upland swamps.

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<sup>1</sup> Cairns, J *et al* (2024) "Mining impacts peatland hydrology reducing discharge and water storage volumes", Journal of Hydrology, Volume 640, 131735  
<https://doi.org/10.1016/j.jhydrol.2024.131735>

These swamps above Dendrobium coal mine lie in the Avon and Cataract drinking water catchment, not only are they are important habitat, they're also important for the drinking water supply for the Sydney, Illawarra and Shoalhaven human population.

It is not a fair trade. Losing the swamps above Dendrobium do not lead to more swamps being created elsewhere. It's just a net loss of swamp habitat. It's an irreplaceable habitat and an eco-system service that our human population relies on now and into the future in a rainfall regime that is become more erratic and extreme.

In 2021 the Independent Commission of Inquiry rejected the Dendrobium coal mine expansion proposal because it would cause irreversible damage to the drinking water catchment. WaterNSW also notes that *“Increasing climate variability means that, without action, we could face a shortage of drinking water with more and longer periods of severe drought”*.

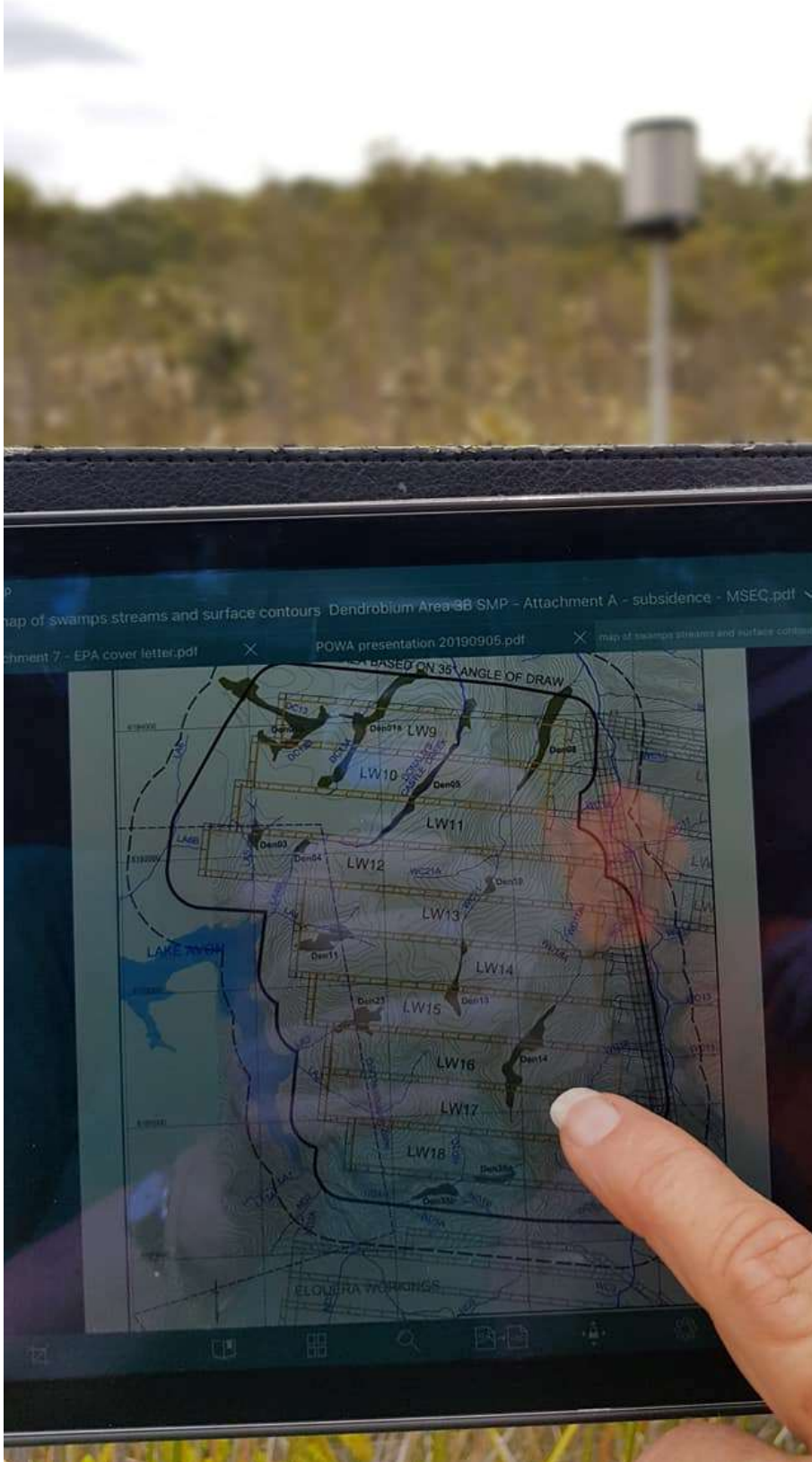
The Mt Kembla coal mine has agreed to pay a record \$2.9 million to avoid court for unlicensed water extraction due to mine subsidence from existing approvals. This is a significant amount, but insufficient to replace the irreversible damage to the drinking water catchment. Instead of offsetting habitat destruction, the NSW government must place a moratorium on mining in our drinking water catchment. The offsetting process should be halted.



Dendrobium coal mine’s existing approvals enables them to continue undermining upland swamps in the Avon and Cataract drinking water catchments till 2030.

On 18th September 2019 I had the rare opportunity to be escorted into the Sydney Drinking Water Catchment by Water NSW staff, accompanied by National Parks Association volunteers and journalists. We visited swamps 1B and 14, and watercourse 21 and witnessed first hand the damage being done by mine subsidence.

*Photo of mine warning subsidence sign taken in the Cordeaux Dam drinking water catchment, 16 September 2019.*



*Photo of taken in Swamp 14 of the Avon drinking water catchment on 16 September 2019 - a healthy swamp 14 that was destroyed by undermining from a Dendrobium coal mine longwall.*

If the government decides to perpetuate biodiversity “offsetting” then it is important that red lines are defined which establish thresholds that prevent serious and irreversible biodiversity loss. In this warming world in which bushfire severity and frequency are increasing, upland swamps are habitats which are too precious to be subject to offsetting. They must be protected in their entirety, along with upland catchments that feed them (hydrologically) and the landscapes in which they are formed.

The [Addendum to NSW Biodiversity Offsets Policy for Major Projects: Upland swamps impacted by longwall mining subsidence | NSW Environment and Heritage](#) that was published by NSW Environment and Heritage in 2016, fails to protect and maintain biodiversity.

The Addendum on Upland Swamps fails to meet objective 2 and 3 of the Biodiversity Offset Policy

“2. to improve outcomes for the environment and communities

3. to provide a practical and achievable offset scheme for proponents.”

Though subsidence impacts on upland swamps take time to materialise, they are certain and irreversible. The addendum outlines an “adaptive management approach to environmental consequences throughout the life cycle of a major project that involves longwall mining underneath upland swamps”. However in spite of surface to seam cracking, mining continues. The addendum states that “Proponents must prioritise avoiding and minimising the impacts of mining on all biodiversity values, including upland swamp ecological communities. This should not only occur in the planning phase of a project, but throughout its entire life, including the operational phase.” Offsetting should only be a compensatory action. It is entirely possible to avoid subsidence by avoiding mining beneath upland swamps and the adjacent catchments that feed them.

Once the need to offset upland swamp damage was identified there should have been a mechanism to prevent further longwall mining under other upland swamps. However this has failed to occur.

The NSW Biodiversity Offsets Policy states that “offsets must be enduring, enforceable and auditable”. This is failing. “Supplementary measures can be used in lieu of offsets when offsets are not available” is a ‘get out of jail free card’ which fails to protect critical habitat and associated threatened species.

NSW biodiversity offsets are permitting major biodiversity losses to occur now in return for a “promise” of uncertain future gains. It’s time to end the practice, and protect nature and the ecosystems services essential that sustain the rich tapestry of life.

Kind regards,

Cath Blakey

Wollongong