

## Smoke, Mirrors and Biodiversity Offsets - Maules Creek Coal Mine

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Concern among scientists is growing that current state and federal offset policies are seriously flawed. This case study highlights some of these flaws

Offset ideology allows for the destruction of areas of high conservation value habitat, on the *proviso* that bushland of equal or better quality elsewhere will be managed for conservation in perpetuity (namely 100 years) to compensate for the loss. There is however, very little evidence to support that offsets for development actually work as there is a large degree of inconsistency in how offsets are applied and reviewed by overseeing authorities.

There is always an environmental loss using offset methodology. However, if applied appropriately, correctly and consistently across all industries there is a potential for improved habitat quality across the landscape as a result of increased reservation and protection. Such ideology if used appropriately could lead to an increase in the quality and reservation status of many poorly conserved and threatened vegetation communities. Appropriate offsetting should allow for very rare and threatened communities and species to have an increased dollar value on the open market. Thereby providing greater funding for the recovery of these communities and species. Furthermore where communities or species cannot be offset appropriately due to their extreme rareness development should not proceed.

Currently none of these valuable potential outcomes are occurring. Offsetting more often than not leads to any development being given the go ahead despite the inability to source appropriate offsets. Thus allowing for the destruction of extremely rare habitat and the loss of important threatened populations with no immediate or long-term conservation gains. This case study is an example of how offsets fail to deliver.

In northwest NSW, the Maules Creek Coal Mine (MCCM) owned by Whitehaven, will clear 1,665ha (22%) of Leard State Forest. An area known to provide habitat for 28 threatened species including 540ha of White Box grassy woodland, a critically endangered ecological community (CEEC). Whitehaven have provided 12,917ha of rehabilitation and extant native vegetation to offset for this clearing. Thousands of hectares of offsets sounds great but when those hectares are, inferior or unsuitable habitat or will take more than 100 years to approach the diversity and structure of that destroyed the numbers are meaningless.

### Flaw 1: No Checks or Balances

The Maules Creek Community Council who is opposed to the MCCM project, asked local ecologists and botanists familiar with the area to provide an independent assessment of the mine's offset proposal. Those reports can be viewed at <http://www.maulescreek.org/whitehaven-offsets-report/>.

Field inspections revealed the vegetation mapping prepared by the mines consultant for the biodiversity offset proposal was wrong. The mapped communities are not representative of the dominant tree species present, and no White Box trees were found in extensive areas mapped as White Box–Stringybark grassy woodland. In fact, the majority of the offset areas described as critically endangered Box – Gum woodland actually support Stringybark and Blackbutt open forests with a predominantly shrubby not grassy understorey. Those communities are not rare and are currently well reserved, unlike grassy White Box woodland, and are generally protected under current legislation.

The proposed offsets will not therefore compensate the loss of 540ha of CEEC destroyed in Leard State Forest. Nor will they provide equivalent habitat for *EPBC Act* threatened species; Swift Parrot, Regent Honeyeater, Large-eared Pied bat, Corben’s Long-eared bat, Koala and *Tylophora linearis*. At best, the habitat in the offsets is marginal for these species. The offsets therefore fail to meet the ‘like for like’ and ‘equal or better’ approval requirements of the *EPBC Act Environmental Offsets Policy (2012)*.

How can this happen? Well it is our understanding that no federal environmental agency ecologists have visited the offset properties. NSW and Commonwealth departments accepted the vegetation mapping and habitat values of offset areas produced by the mine’s consultant as valid and correct, without any checks or balances.

In the absence of an independent review process, mining companies are in the position of both ‘gamekeeper’ and ‘poacher’. Agency reviewers of EIAs and biodiversity offset proposals must be mindful that these are not independent assessments, but documents that often cherry-pick information to argue for the development. Further, some consultants have experienced having their reports shelved when the results are not to the mining companies liking, with other companies then hired until the ‘right’ results are obtained. Those shelved reports, held under confidentiality agreements, never see the light of day.

## **Flaw 2: Large Offset Areas are Misleading**

Many lay people might wonder what all the fuss is about. So the vegetation isn’t the same, won’t rehabilitation and/or protection of 12,917ha maintain biodiversity in the area? The simple answer is no!

For offsets to be effective, they must provide enough **additional** and **suitable habitat** to enable an equivalent number of all the species that occur in the destroyed habitat to find a territory in which to live and breed. Most importantly, this additional habitat must be available immediately.

In the case of Maules Creek Mine, even if the existing extant offset vegetation did provide suitable habitat it would already be occupied and would not be accessible by many species displaced from Leard Forest. Distance and the fragmented nature of remnant vegetation between the clearing site and offset area preclude the movement of many fauna species.

Derived grassland areas proposed for rehabilitation adjacent to the forest to be cleared, will not provide many important habitat features necessary for species' survival for more than 100 years, including; mature trees (more than 40 years), old growth trees (more than 100 years), hollow-bearing trees (more than 140 years) and soil biota (time-frame unknown). Under this approved offset proposal, it is likely all species will decline and local extinctions will occur.

### **Flaw 3: No Guaranteed Protection and Ongoing Management of Offsets**

A serious failing of the offset policy is the long-term protection and management of offset areas. Given current government policy it is also likely there will be no monitoring of offset areas post-mining and no legal enforcement.

A condition of the current approval for MCCM, is that offset areas must be covered by a Voluntary Conservation Agreement (VCA). Contrary to popular belief however, areas under VCAs **are not** protected from mining. An approval condition allows mines to apply to the Minister for consent to clear and develop VCA areas, as has happened numerous times in the Hunter Valley. It is also likely clearing will not be limited to the 1,665ha in the initial approval, as it is common for mines to apply for extensions to mining, resulting in the loss of more forest or areas set aside as offsets.

VCAs are only as good as the motivation of the land manager to manage the land for conservation. In this case, MCCM will be finished and gone in 21–27 years, abdicating any further responsibility for the ongoing management of the offsets. The most likely scenario will see the offset properties sold on the open market. The VCA will still be on title, but management of these areas will amount to little more than preventing clearing, already prohibited under the *Native Vegetation Act 2003*. The greatest habitat gains likely within extant vegetation under a VCA, is an improvement in ground layer diversity and overstorey regeneration. These gains are however fragile and easily destroyed by inappropriate livestock grazing, which is likely to occur in the first prolonged drought.

Contrary to the mine's biodiversity proposal, in 21-27 years the rehabilitated woodland areas will at best be a tall shrubland. Rehabilitation of native vegetation is a risky undertaking, management intensive and highly subject to the adverse effects of climate, weed invasion, insect attack, grazing and individual plant vigour. Even if successful, in 21-27 years, the rehabilitated areas will lack the structural and floristic diversity and regenerative capacity of the vegetation cleared.

There are no guarantees for future management of offsets beyond the life of the mine other than VCAs. This lack of guaranteed long-term management is inconsistent with the *EPBC Act Environmental Offsets Policy (2012)*.

#### **Flaw 4: No Guaranteed Standards**

The government's acceptance of clearly inferior offsets, inconsistent with their existing policy, significantly diminishes the ability of the *EPBC Act* regulations to protect *Matters of National Significance* and makes a mockery of offset policy guidelines. It sets very low environmental standards, a dangerous precedence for development approvals across the nation.

The whole offsets policy needs scientific review. No scientist would endorse the simplistic assumption that revegetation and regeneration can replace a mature woodland ecosystem in a 21-27 year time-frame. The Maules Creek Mine approval highlights the failure of the offset policy 'to improve or maintain' or 'increase the extent of native vegetation', which is the national biodiversity strategy goal. Whichever way you look at it there will be substantial 'net loss' and species decline under this Government policy.

#### **Artist impression of the Leard State Forest after open cut mining for 21–27 years**





## **Illustration of offsets not “like for like” vegetation community or habitat**

**Stringybark open forest on the offset property Mt Lindesay, not the critically endangered ecological community of White box Stringybark grassy woodland as claimed**



**Below Grassy White box woodland critically endangered ecological community of Leard State Forest**



## Recommendations resulting from Senate Inquiry into the use of offsets

A senate inquiry was held between 5<sup>th</sup> March 2014 and 25<sup>th</sup> June 2014 to consider 95 public submissions relating to the appropriateness and effectiveness of the use of environmental offsets in federal environmental approvals in Australia.

The issues identified with the Maules Creek mine offsets were a significant part of the inquiry which resulted in 21 recommendations for amendments to the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy*. The committee was persuaded by evidence that some aspects of the policy and its implementation could be improved by;

- The EPBC Act Offsets Policy principles should have statutory status, this will create an obligation on the minister to ensure that the offset principles are more rigorously implemented
- Offsets must be additional and deliver a conservation gain
- There is insufficient emphasis on avoidance and mitigation measures
- Offsets should not be used as an excuse to allow developments in all circumstances
- Offsets should be unavailable in some circumstances; for example where the impacted matter is listed as critically endangered or within a world heritage area.
- Offsets must be fully identified prior to approval being given for a particular activity
- Offset plans and strategies must be published on the Dept of Environment website.
- The Dept must verify all offset calculations and information provided by proponents
- Dept must be adequately resourced to be able to review proposed offsets
- Dept must be adequately resourced to be able to monitor effectiveness of offsets
- Improve legal mechanisms to ensure that offsets are secured into perpetuity
- Improve legal mechanisms to ensure that funds are available to manage offsets into perpetuity
- Develop a strategic approach to identification and delivery of offsets, and encourage advanced offsets
- State and territory standards and legislation should meet national offsets standard, not merely be accredited as meeting the objects of the EPBC Act.