

ORANGE FIELD NATURALIST
& CONSERVATION SOCIETY INC.
PO Box 369, ORANGE NSW 2800

Planning Services,
Department of Planning, Industry and Environment
GPO Box 39, Sydney NSW 2001.

Objection to McPhillamy's Gold Project SSD-9505.

The Orange Field Naturalist & Conservation Society is composed of amateur and professional naturalists and conservationists who have a keen and knowledgeable interest in the sustainable management of land and water in the Central West of New South Wales. The society encourages participation in the conservation of the environment for the benefit of the people living in the Orange and Blayney districts and future generations.

The OFNCS objects to the proposed McPhillamy's mine due to a number of adverse environmental effects. They include, but are not limited to, the following:

Note that it is not possible to reference all the points being made, as would be normal, because the EIS and appendices consist of 6370 pages. They are on a USB which makes it difficult to refer back.

Effect on water quantity and quality

1. **Reduction in water flows and volume in the Belubula River.** The decrease of water from the upper tributaries of the Belubula River will have a measurable effect to at least the Carcoar Dam some 26 km downstream.

The upper Belubula River above the tributary labelled "A" will lose its feeder springs which occur under the mine infrastructure, overburden dumps and the tailings dam. All the surface water will be captured before it reaches the river and used for the mine as no contaminated water is allowed to leave the site. The open cut will intercept a large portion of the nearby ground water and the water from the river alluvials. The open cut will be 380 metres below the river level.

When the processing becomes routine, between 636 ML to 1402 ML of water will be taken from the river. The upper tributary flows have not been investigated for the EIS which is a gross oversight.

2. **Use and impact of bores.** For the first year, possibly longer, during the construction and the initial treatment of the ore it is proposed to supplement the surface water with bore water until the planned pipeline from near Lithgow has been commissioned. Previously Regis said that they would not use bore water. The use of the bore water will depress the water table reducing the subsurface flow to the river, impeding the access for trees and for neighbouring bores.
3. **Importation of toxic water and brine.** It is proposed to transfer vast amounts of toxic coal mine de-watering water and brine from a desalination plant over the Great Dividing Range which have been deemed to be unsuitable to be released into the Sydney Water catchment. The imported water which has been stopped from being discharged into the Cox's River has not been analysed for the purpose of the EIS. The TDS (total dissolved solids) given is no measure of toxicity or its suitability for stock use (as is implied in the EIS) until the constituents are known. Using the TDS figures given in the EIS the water could contain between 2,847 to 33,215 tonnes per annum of various salts which will be an everlasting legacy perched on top of and above the Belubula River.
4. **Contamination from overburden and tailings dam.** Contamination of the river will result from run-off from overburden dumps consisting of acid-forming rock, which will not only lower the pH but dissolve various metals including arsenic. It is intended to encapsulate this rock, however as it comprises almost half of the overburden, so it is difficult to see how that can be achieved.

The tailings dam will contain a slurry of ground-up minerals, process chemicals and salty toxic imported process water, which will all be concentrated as the tailings partly evaporate. The remaining mixture will gradually seep into the surrounding country for decades. The surface of the tailings dam cannot be rehabilitated to the current grazing conditions.

5. **Unrealistic restoration time-frame.** Restoration will take much longer than the proposed three years. The tailings dam will continue to seep or leak into the upper river and the open cut void for decades (Appendix D p.78). The tailings dam will be a permanent legacy sitting above the river forever. The open cut void and its pond of toxic water at the base will be there in perpetuity. The water will attract birdlife, and unless they are prevented from accessing the water, this could lead to deaths, as happened at North Parkes Mine.

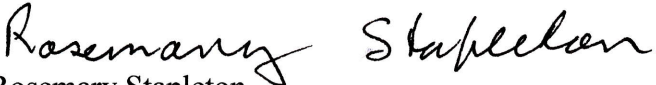
Effect on biodiversity

6. **Aquatic animals and riparian ecology.** The effect on the aquatic and riparian ecology has not been adequately investigated. Some sensitive fish habitat will be destroyed and there do not appear to have been any actual baseline monitoring of fish species. Nor have other native aquatic or riparian fauna been adequately surveyed, including platypus, which are known to occur in this river system.

7. **Impact on threatened fauna.** Although the area appears to be mainly grazing land, there would be considerable loss of remnant woodland, including EECs and habitat for threatened species such as Superb Parrot, Squirrel Glider and Koala. The Superb Parrot issue has been dismissed as the area does not contain 'critical' habitat for the survival of the species, but it is our experience that this area would provide excellent open woodland foraging habitat. Probably the reason there have been no previous records is simply due to the lack of public land available for bird-watching in the area. And the loss of 77 ha of Koala habitat is simply unacceptable; the EIS itself admits that this development 'interferes with the recovery of the Koala'. Revegetation efforts are to be commended, but will do little to provide habitat for many decades, by which time it might be too late for these locally very rare species.
8. **Disturbance due to mine operations.** Many other species will lose their habitat and or be disturbed due to the noise, lighting and dust and there has been little assessment of this effect. Migratory moths and their pathways have not been considered, for example.
9. **Lack of details on offsets.** The purchase of land south of Blayney as an offset is a good start, but the land should have been assessed as suitable prior to the publication of the EIS. The section on offsetting is difficult to critique as it makes no definitive statements about whether the land will be used as an offset or not. If it is to be used, it is unlikely to provide a suitable habitat for Koala and many other species as it has poor landscape connectivity.
10. **Inadequate assessment of hollow-bearing trees.** Whilst the areas of remnant woodland to be destroyed has been calculated, the Society is very concerned about the lack of information about hollow-bearing trees, of which there are sure to be a large number. In S5.1 (Appendix N) there is a statement that reads: 'hollows varied from largely absent in areas of regrowth and younger vegetation to abundant in some vegetation zones', but we have failed to find other information on the impact on these features. As the loss of hollow-bearing trees is a Key Threatening Process in NSW, this seems to be a major oversight on behalf of the compilers of the EIS.

These are only some of the probable environmental outcomes resulting from just 10 years of mining. The mine would appear to have been planned for an area that will wreak the most damage possible, particularly to the Belubula River and its occupants. The Society is concerned that the small amount of economic activity this mine will generate does not seem to justify the environmental degradation, not to mention the disruption to residents.

Thank you for the opportunity to comment on this proposal.


Rosemary Stapleton

Secretary, Orange Field Naturalist and Conservation Society.

21 October 2019.