

**McPhillamys Gold Project (SSD 9505) – Independent Planning Commission Public Hearing:
Aboriginal Cultural Heritage Assessment and Recommended Conditions of Consent –
Independent Expert Opinion – Response to Regis Submission of 1 March 2023
Peter Kuskie, South East Archaeology**

6 March 2023

1. Further to the independent expert opinion provided by myself on 11 February 2023, in relation to Aboriginal cultural heritage matters associated with the proposed McPhillamys Gold Project, at the request of EDO NSW acting on behalf of Wiradjuri Elder Ms Nyree Reynold I have reviewed the response to my comments provided by Dr Cupper of Landskape Heritage Management dated 28 February 2023 (Appendix C of the Regis Submission dated 1 March 2023).
2. In my opinion, the response of Dr Cupper offers no material evidence or new information of substance to persuade me to alter my opinions expressed in relation to the key issues associated with the Project, particularly concerning the lack of assessment of, and potential impacts upon, the sub-surface heritage resource.
3. Dr Cupper does however clarify his qualifications and experience, which satisfactorily addresses issues #41 and 42 raised in my submission.
4. I find the argument that the SEARs do not require *adherence* to the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* a moot point. The lack of assessment of the potential sub-surface resource and consequent scientific uncertainty are issues that should have been addressed by *any* Aboriginal Cultural Heritage Impact Assessment, irrespective of the precise wording of the SEARs or any guidelines.
5. I note Dr Sneddon's comment that the "specialist archaeological reports prepared for the Project also assess the Specified Area as having potential to contain subsurface Aboriginal archaeology". *Precisely the key issue we have identified.* However, there has been no actual archaeological investigation done to ascertain the nature, extent and significance of that resource, notwithstanding the proliferation of superfluous opinions unanchored from any supporting evidence about how minimal or low value such a resource would be.
6. I reiterate my concerns about the Heritage NSW review and approval process, something they could clarify by providing their internal review document (presumably dating to late 2019 or early 2020) of the Landskape 2019 heritage report.

Prepared by:



Peter J. Kuskie,
Director,
South East Archaeology Pty Limited.

Re. Regis 'Response to Additional Material'¹

Item 1: Likely social impacts: Because the benefits listed by Regis do not directly address the adverse impacts identified, they do not directly mitigate them.

Items 3 & 11: Adequacy of mitigation measures: Since the proposed management plans have not been written, their adequacy is unknown.

Item 4: Conditions, consequences and penalties: Regis says that I assume that "conditions developed by the DPE are weak and ineffectual because they do not include penalties or consequences for inadequate implementation or effectiveness".

This is an incorrect reading of my text. In my opinion the proposed conditions are **both** weak **and** lack consequence for inadequacy.

The policies I refer to as unnamed were cited by the Department in its Assessment Report not by Regis.

Item 5: Social impacts and benefits: Under this heading Regis lists four economic benefits. An economic benefit is not the same as a social benefit. While jobs are proposed by Regis as a social benefit, I was unable to discover the basis for the number of jobs claimed.

Item 6: Kings Plains impacts and mitigations: Regis assumes that noise and dust mitigations will always be fully effective (trigger levels will not be reached). However, the presence of trigger levels and recognition of exceedances (Recommended Conditions, Part D) undermine that assumption.

Item 8: Outmigration: Negotiated agreements provide an opportunity for some landholders to leave. Loss of landholders = loss of members of the community. The more people opt to leave, the greater the loss.

Item 9: Rental properties: People occupying rental properties on a short term basis are unlikely to commit the same resources to a property as owner occupiers. At no point do I say that renters 'are a negative influence on the composition of an established community'.

Item 12: Accommodation village: This village is relied on in the EIS as a mitigation for increased housing stress in Blayney Shire. If 'discussion about construction of an

¹ <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/11/mcphillamys-gold-project/correspondence/applicant/230301in-applicant-response-to-additional-material-mcphillamys-gold-projectredacted.pdf>

accommodation village should be disregarded', no mitigation for housing stress is proposed by the applicant.

re. Regis submission dated 17 February 2023, pp47-48²

There is no 'new' information in the social impact section of this submission.

The submission says that the additional population will 'stimulate demand for residential development in Blayney and neighbouring areas' (Submission p48). However, this means that the population would arrive before this response occurred, that is, the arriving new residents would exacerbate existing levels of housing stress. As house construction takes time, any stimulating effect would not address housing stress in the short term.

Claimed population growth is based on estimates but the basis for these is still unclear.

The submission anticipates the additional population would contribute to increased participation in local schools, sporting groups, volunteer groups and support local businesses. However the likely extent of these impacts is not addressed and does not differentiate the likely impact on these activities by construction workers who are likely to be FIFO/DIDO and who are needed for the construction period only, from the impact of many fewer operational workers only some of whom may move to the Shire.

Alison Ziller

6 March 2023

² <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/projects/2022/11/mcphillamys-gold-project/email-and-postal-public-submissions/applicant-submission/regis-submission--170223-redacted.pdf>



Associate Professor Mathew Crowther
School of Life and Environmental Sciences
7 March 2023

Response to Regis Resources Limited McPhillamys Gold Project Submission to the Independent planning Commissioner 17 February 2023

I am an expert on koalas, and I supplied comment to the original McPhillamys Gold Project proposal regarding the impact on koalas. Here I respond to the response by Regis Resources Limited.

I would first like to state that my comments were not based on new information unavailable to Regis Resources Limited but based on what was presented within the proposal.

3.5.2 Survey effort for Koala within mine project area

Regis included the methods that they used, and was considered acceptable (call playback, scat searches and spotlighting) based on the legislation. However, my comment was these methods may not have been sensitive enough to pick up koalas at low densities. The evidence is that they were not sensitive is that a koala was opportunistically seen, even when the surveys failed to detect koalas. Hence, I suggested passive audio devices, drones and detection dogs, which tend to be more sensitive to lower population koala densities.

3.5.3 Proposed biodiversity stewardship site

Regis now confirm presence of koalas at the offset site, using detection dogs. This was not available in the documents I had access to. However, my concerns about offsets remain, that they are no substitute for impact avoidance or mitigation on site. Offsets are just allowing funds for conservation for koalas at other locations. This does not address the conservation of koalas at the mine site. I realise that they are allowed to use this form of mitigation as per the legislation, I just comment that it does not maximise the conservation outcomes for koalas on site.

Hence my responses are that even though they have complied with their interpretation of the legislation regarding koala surveys and offsets, they have not done the best actions for the detection and conservation of koalas.

Sincerely,

Associate Professor Mathew Crowther

From: Ryan Vogwill [REDACTED]
Sent: Thursday, 9 March 2023 12:30 PM
To: Sharyn Goldstien; Nadja Zimmermann
Subject: McPhillamys gold mine - Regis response to IPC hearing and reports

 External email >

Hi Sharyn and Nadja,

I have reviewed the relevant sections of the Regis response documents and have the following comments.

Their rebuttal of my points does not present any substantive new information that changes any of my opinions. On the matters in question they just say they disagree and quote their existing documents. I would have expected that they would have tried to address my concerns with some new analysis but this has not occurred.

For example they state that the fractures are filled with clay and quartz (so are impermeable) but if that's the case then why are there so many springs in the area, with variable water quality (including some with old groundwater) that are often, by their own analysis, fault/fracture type springs (i.e. permeable)? They have not included any explicit consideration of fractures or fracturing in the groundwater modelling but could have as per my comments and the JBS&G review.

There is considerable uncertainty in these aspects of their impact assessment hence why such differing scientific opinions on these matters can exist.

Kind regards
Ryan



Ryan Vogwill - Director & Principal Hydrogeologist

PhD (Applied Geology), BSc (Hons – Applied Geology), MAIG and MIAH

M [REDACTED]

E [REDACTED]

hydrogeoenviro.com.au  

McPhillamys Gold Project: Appraisal of the economic benefits assessment

Prepared by Andrew Buckwell and Professor Christopher Fleming, Griffith Business School, Griffith University briefed by the Environmental Defenders Office, on behalf of Belubula Headwaters Protection Group

Whose costs and benefits count

The proponent re-states it has carried out its cost benefit analysis in accordance with two guidelines set out by the New South Wales government:

1. NSW Government. (2015). *Guidelines for the economic assessment of mining and coal seam gas proposals*.
2. NSW Government. (2017). *Guide to Cost-Benefit Analysis*.

In particular, the proponent has followed the guidelines that state the referent group, or those who have 'standing' are the people of New South Wales only. We do not dispute that this is how the guidelines are currently drafted. Overall, the cost benefit analysis is well-constructed and well-argued.

Our arguments are based on failings within the guidelines, particularly in terms of the need to include the standing of people outside New South Wales and who are cover by treaty or regulation that treats the impacts of climate change as an external cost. We stand by this assertion. The impacts of climate change are undeniably global in nature and virtually all the world's population is in the jurisdiction of a nation that is signed-up to the Paris Agreement.

The proponent states that if a global view of the costs of carbon emissions are to be included, a global view of the benefits of the gold mine are similarly required. They argue that the global production benefits of the mine are the revenue earned from the sale of the gold in addition to production benefits of any "[f]oreign ownership". We assume this means the value of any changes in share price that flows to foreign owners should be considered a benefit of the project. Whilst it might be difficult to estimate and project forward, given the general fluctuations in equity prices¹ and ownership, presumably it is potentially possible, so it would be useful to compare.

The social cost of carbon

The proponent takes issue with the 'prices' of carbon we originally used, arguing that the guidelines recommend using exchange prices, for example, using the price of carbon emissions certificates. We stand by our arguments that fluctuations in exchange prices of such certificates remains an issue and until such time as Australian and the European Union policy settings are sufficient to meet their respective global commitments, emissions certificates prices do not reflect their true scarcity. Furthermore, given the recent global and national issues associated with the integrity of many carbon schemes, we expect certificate prices to continue to vary considerably until integrity issues are resolved. Therefore, we believe the cost-based approaches we put forward, such as the social costs of carbon, remain a more grounded and robust approach to valuing the external cost of greenhouse gas emissions.

The proponent also counters the values of the social cost of carbon we put forward and point to a range of estimates from a meta-analysis of the social cost of carbon provided by Tol (2022) in an unpublished paper. The choice of an unpublished paper by Richard Tol (a well-known contrarian in economics/policy circles on climate change) where he includes his own estimate of the social cost of capital in the analysis (an estimate that sits well outside the bounds of all other estimates in the

¹ See <https://www.marketindex.com.au/asx/rrl>

literature) to justify the chosen cost of carbon is highly questionable. Specifically, the estimates collated by Tol's are heavily skewed by one outlier (US\$ –355 / t), which is Tol's own value from a published paper from more than twenty years ago (Tol, 2002). Whilst Tol is a well published author in economics journals, he takes a relatively sanguine view of the impacts of climate change, arguing that the economic impact is "relatively small", though real and negative (Tol, 2008, p. 3), which is contrary to the scientific consensus (Oreskes, 2018). Removal of this very clear outlier from the dataset increases the weighted average to US\$ 70 / t C or **AU\$ 118 / t CO₂-e** in 2022 values, which is closer to, yet still well below, the values put forward by Ricke (2018) and the US EPA (2022).

In addition to the question of bias in the Tol paper, it is unclear whether the costs of carbon are carbon or carbon dioxide equivalent. This makes a material difference, and it is not clear that the proponent has interpreted this correctly either.

Methodological innovations

The proponents state they have used discount rates and carried out sensitivity analysis using those recommended by the NSW guides. This is the correct approach. The use of differential interest rates for different types of capital, while not supported by the NSW guidelines and relatively new in economics, is gaining traction - so we totally reject the assertion that it is ... "a self-serving approach to help justify environmental outcomes". There is no strong theoretical basis to suggest reproducible capital with a relatively short life span (e.g. a bridge) has to be discounted at the same rate as irreplaceable natural capital.

As stated by Professor Bob Costanza and others:

Discounting the future is essential to inform long-term decisions, but the future of humanity is being put in jeopardy by using the same discount rate for all capital types. Different types of capital assets (built, human, social, natural) have inherently different characteristics and contribute differently to the production of all goods and services. They will behave and depreciate differently and will thus require different discount rates and different approaches to discounting.

Andrew Buckwell

Griffith Business School
Griffith University



Professor Christopher Fleming

Dean of Research, Griffith Business School
Griffith University



Referenced materials

Costanza, R., Kubiszewski, I., Stoeckl, N., & Kompas, T. (2021). Pluralistic discounting recognizing different capital contributions: An example estimating the net present value of global ecosystem services. *Ecological Economics*, 183, 106961.

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Ricke, K., Drouet, L., Caldeira, K., & Tavoni, M. (2018). Country-level social cost of carbon. *Nature Climate Change*, 8(10), 895-900. <https://doi.org/10.1038/s41558-018-0282-y>

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- US EPA. (2022). *Supplementary Material for the Regulatory Impact Analysis for the Supplemental Proposed Rulemaking, "Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review"*. E. P. Agency. https://www.epa.gov/system/files/documents/2022-11/epa_scghg_report_draft_0.pdf