

**Submission
No 170**

**INQUIRY INTO RATIONALE FOR, AND IMPACTS OF,
NEW DAMS AND OTHER WATER INFRASTRUCTURE IN
NSW**

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I am writing to inform the committee of another new dam proposed for the Central Tablelands of NSW. However this dam has some very significant issues which the committee should be made aware of.

Regis Resources is a mining company, from Western Australia, and have recently bought over 6000 acres of prime agricultural grazing land 7km north east of Blayney, between Bathurst and Orange. They are planning to mine gold at their McPhillamys Mine, using the cyanide extraction method, and then store the toxic tailings waste in a new tailings storage facility (TSF) they plan on building directly on top of the Belubula River.

The Belubula river is the main catchment for Carcoar Dam, which flows directly into the Lachlan River and contributes to the Murray Darling system.

The tailing storage facility, will be over 600 acres in surface area. The wall will be 50 metres high and will be approx. 1.5 kms long, and will hold 50,000 megalitre of tailings. The TSF will also lie directly over more than 12 springs, which naturally feed the river. There is major concern, not only that the damming of the Belubula river will effect the flow of the river, but the possibility of the contamination of the river due to the springs below, and proposed inadequate lining of the facility will pollute and destroy not only the Belubula, but also downstream into the Carcoar Dam and the Lachlan River also.

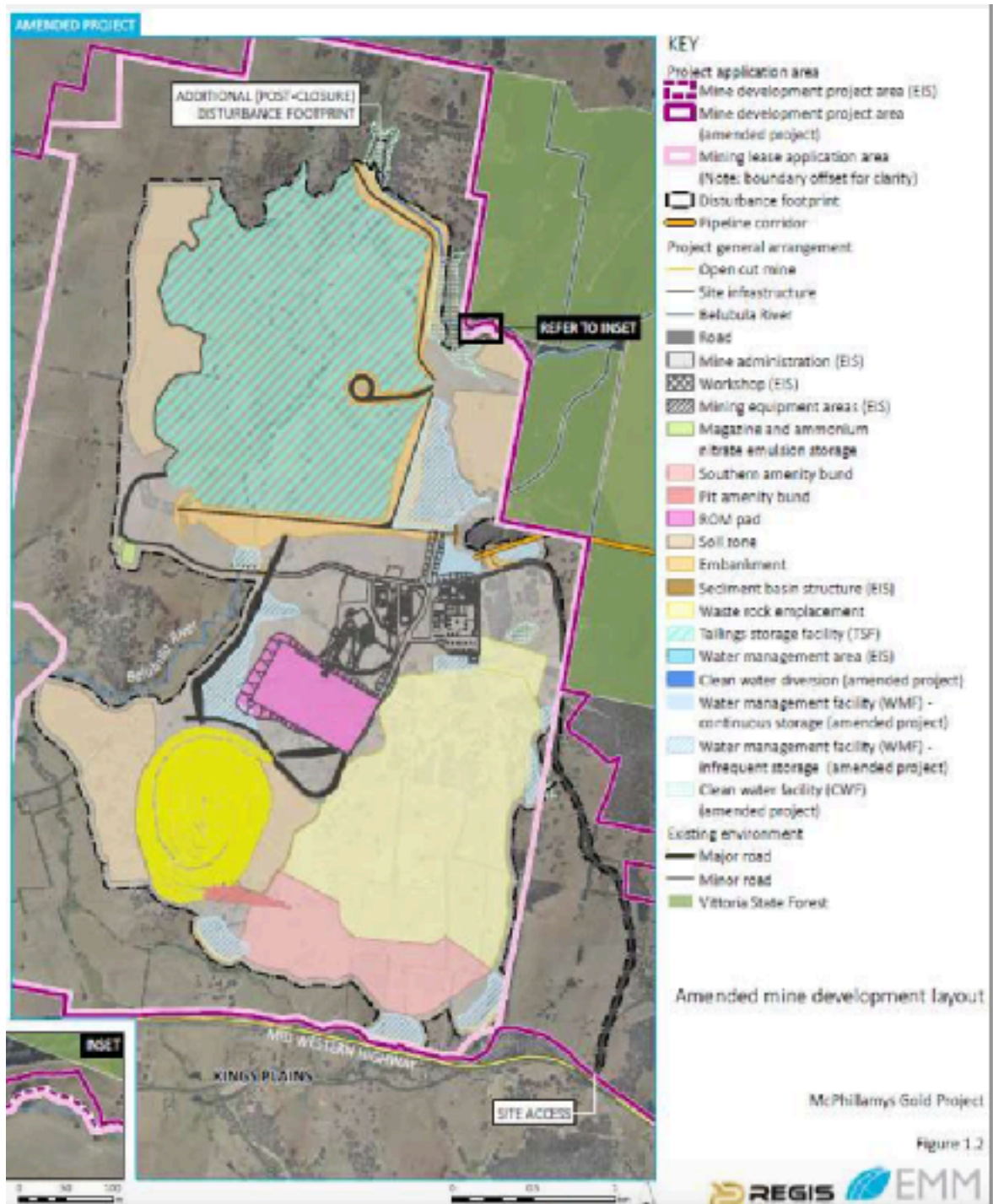
The proposed structure of the TSF is the most economically efficient for the company due to the need for only one wall across the valley, and the intermittent lining and clay based lining is proof that this company is only trying to achieve the cheapest construction methods possible, and not the safest.

Preliminary work has already been undertaken by Regis with bores sunk and aquifers drained and stored in dams.

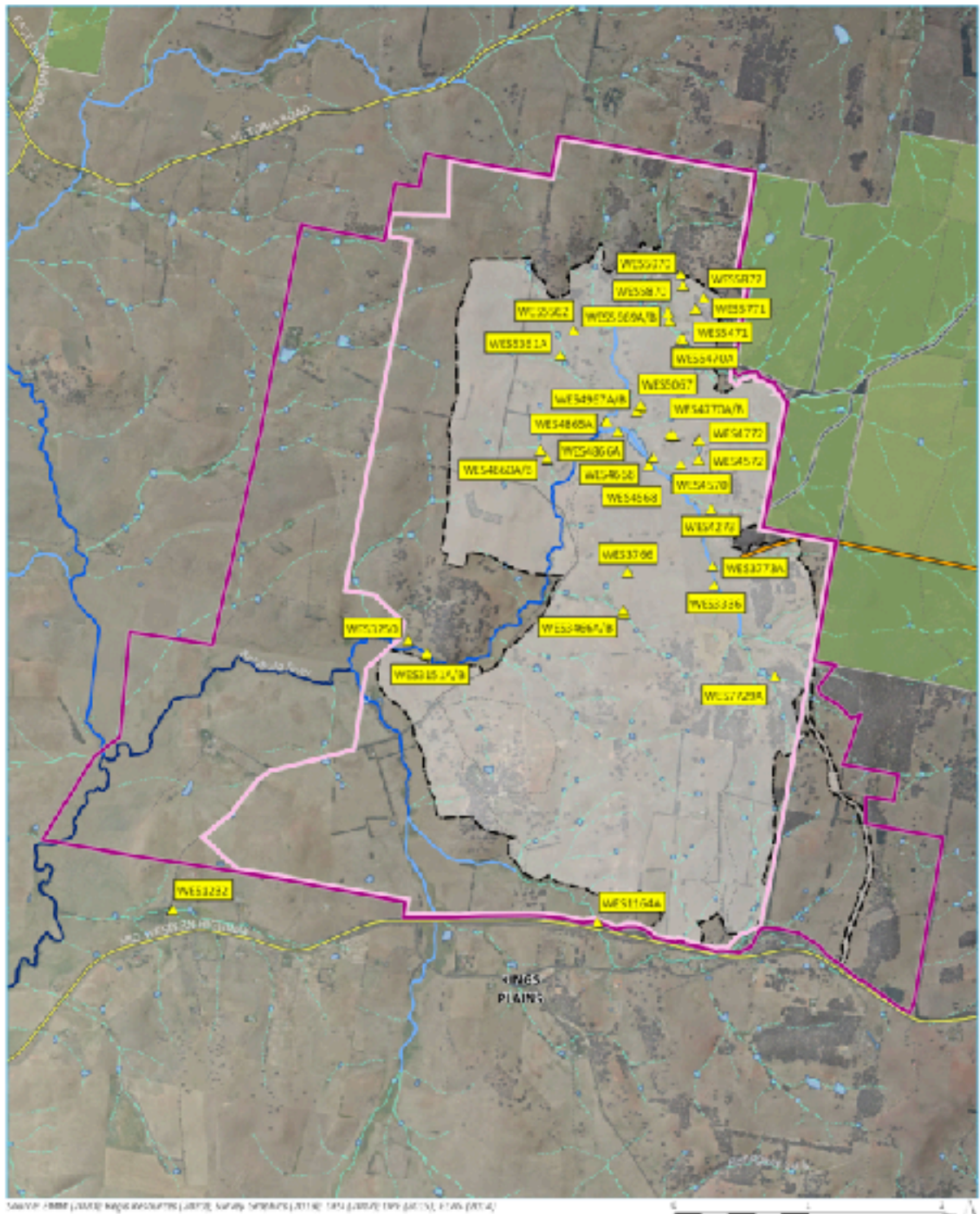
As stated in the Lachlan Unregulated and Alluvial Water Sources (DPI Water 20112c), *'Water sharing plans aim to achieve sustainable groundwater extraction by limiting extractions to a proportion of aquifer recharge. The remainder of recharge is reserved for the environment.'*

With more than 12 springs in the river at this point where the TSF is proposed, there will be no fresh water being added to the system for flow downstream to recharge the river.

Below: an updated map of the mine site lay out. The TSF is in the light green striped area, and the Headwaters of the Belubula River can be seen faintly below.



Below is the map taken from pg.32 Appendix C Surface Water - Groundwater Interaction Assessment in the Reply to Submission document, showing the Springs and Seeps located in the TSF perimeter (the upper half of the black dashed perimeter is the proposed TSF site).



KEY

Project application area	▲ Identified seep/spring	Strahler stream order
Mining development project area	Birding environment	1st order
Mining lease application area (Note: boundary offset for clarity)	Major road	2nd order
Disturbance footprint	Mine road	3rd order
Pipeline	Vehicle track	4th order
	Victoria state forest	5th order
	Waterbody	6th order
		8th order

Seep and spring locations

McPhillans Gold Project
Surface water-groundwater interaction assessment
Figure 2.13

Lastly, there is another threat to this water catchment area, with the proposed water pipeline from Mount Piper Power Plant at Lithgow. This 85km pipeline will pump the brine water from the power plant, (which test results show that the very saline water also has many heavy metals in the water) to the McPhillamy's Gold Mine to be used to process the ore. This brine will then be added to the tailings facility which will add to the already toxic water in the TSF.

This proposal needs greater scrutiny before allowing a such a major development to go ahead, and if so will pose a massive threat to the important water sources and catchment in this area.

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