INLAND RIVERS NETWORK

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Major Planning Assessments
Department of Planning and Infrastructure
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Submission of Objection

Cobbora Coal Preferred Project (Application No: 10_0001)

The Inland Rivers Network ("IRN") is a coalition of environment groups and individuals concerned about the degradation of the rivers, wetlands and groundwaters of the Murray-Darling Basin. It has been advocating for the conservation of rivers, wetlands and groundwater in the Murray-Darling Basin since 1991.

Member groups include the Australian Conservation Foundation; the Nature Conservation Council of NSW; the National Parks Association of NSW; Friends of the Earth; Central West Environment Council; the Coast and Wetlands Society and the Wilderness Society, Sydney.

IRN lodged an objection to the original Cobbora coal mine project because of its potential long-term impact on water sources in the Upper Macquarie catchment area of the Murray Darling Basin and on the availability of environmental water allocation to the Maquarie Marshes.

IRN also presented a submission to the Planning and Assessment Commission hearing held in Dunedoo on 11 December 2013 outlining concerns about impacts on groundwater sources and allocations.

IRN maintains a strong objection to the proposed mine because of its impact on surface and groundwater systems and is alarmed that the Preferred Project Report identifies that water needs for the mine have increased since the exhibition of the Environmental Assessment.

IRN also wishes to note that the response to submissions very rarely acknowledges the issues raised in the IRN submission (G-6).

The following key issues outline ongoing concerns with the Cobbora mine proposal especially the increased impacts on water sources proposed in the Preferred Project Report:

1. Macquarie Marshes

IRN is not satisfied with the proponents response to issues raised relating to impacts on water availability to the Macquarie Marshes during extreme drought periods such as the recently experienced millennium drought.

Members of IRN sit on the Environmental Watering Advisory Group that makes decisions about the delivery of planned and held environmental water under the rules of the Macquarie-Cudgegong Water Sharing Plan.

Available Water Determinations for licensed water held in Burrendong Dam are based on inflows to both Windamere and Burrendong Dams. Windamere Dam has proven to be a poor performer and has only filled once since construction.

Flows from tributaries downstream of Windamere Dam, particularly Lawson Creek, contribute to inflows into Burrendong Dam. There have been occasions during periods of prolonged dry weather when storm events in upper Lawson Creek have provided the only inflows into Burrendong Dam.

Environmental water allocations to Macquarie Marshes are held in Burrendong Dam. Contrary to information supplied in response to submissions, the Macquarie Marshes are within the Water Sharing Plan area and a significant element of the Plan relates to providing an allocation of water to the Marshes.

The key issue raised by IRN has not been addressed. This is in relation to access to high flows from the Cudgegong River that would normally flow into Burrendong Dam.

The Preferred Project Report raises further cause for concern.

The proposal to change the size of the intake in the Cudgegong River to 2.0mm is related to an extraction strategy agreement with State Water.

This strategy aims to ensure that as much of the proponent's licence entitlement as possible will be extracted during periods of 'excess flows' in the Cudgegong River.

Cobbora Mine will be the last and largest extractor on the Cudgegong River. The proposal to extract high flows from tributaries inflows below Windamere Dam or rain water rejections will impact on the available water determination for licences held in Burrendong Dam.

The licences transferred from Warren were allocated from Burrendong Dam when all water had been shared. The removal of high tributary flow from above Burrendong Dam impacts on the share of water downstream. This issue has not been adequately addressed by the Office of Water, State Water or the proponents.

2. Water Balance

IRN is concerned that the water requirements for the Cobbora mine have increased from 3,700 ML per year as exhibited in the Environmental Assessment to 4, 340 ML per year.

The water balance model appears to be under additional review.[1] There can be no certainty that this mining operation will not cause significant competition for other water users during periods of prolonged drought.

IRN is concerned about the increased volume of water licences required for the mine.

The maximum surface and groundwater licences required totals 6, 034 ML/a made up of 3,311 ML/a from the Macquarie - Cudgegong Regulated River Water Source, 799 ML/a from the Lower Talbragar Water Source and 1,924 ML/a from the Gunnedah-Oxley Basin MDB Groundwater Source.

This is an increase of 18% from the total presented in the Environmental Assessment. The requirements from the Talbragar have increased from 280 ML to 799 ML and the groundwater licences from 1,495 ML to 1,924 ML. A further 900 ML of groundwater licence has still to be purchased.

IRN maintains that the level of water required for this mining operation will place a burden on other water users, including the environment, in dry periods. The use of long term averages to justify minimal impact on water sources does not recognise the increased level of usage and competition during periods of low water availability.

These are the times when water sources are subjected to severe additional stress, over and above natural circumstances. Increased water demand and usage by the mine 24 hours per day, 7 days per week for a period of 21 years has not been adequately assessed.

The current usage of the purchased licences needs to be assessed against the expected usage by the mine. The loss of groundwater through aquifer interference is vastly different to a water user pumping groundwater to irrigate seasonal crop production.

[1] Preferred Project Report Vol 1 p 64

It is unclear how the rules placed on ground water licences in water sharing plans can be complied with in relation to ground water interception by mining activities. The NSW Government has not resolved this issue through the Aquifer Interference Policy.

The scale of the predicted water impacts of this mine proposal are too great and will not be able to be adequately managed or mitigated.

3. Groundwater Impacts

IRN notes that the newly calibrated groundwater model predicts that draw down on groundwater systems will continue for at least 100 years after mining has ceased. This long term impact on the landscape has not been adequately assessed.

This prediction is a doubling of that predicted in the Environmental Assessment which was based on a new equilibrium being met after a 50 year period.

This major increase in the period of groundwater drawdown is an indication of the long term impacts of the proposed mine that have not been adequately assessed in a costs benefit analysis.

The justification for this level of impact is related to the economic viability of the project. It has been acknowledged that the cost of backfilling all voids would be too great.

The long term impact on groundwater systems is a cost shifting exercise from the mine operator to the environment and future generations.

4. Impact on aquatic ecosystems

IRN notes that the proponent has committed to an aquatic monitoring strategy that includes the formation of a River Monitoring Committee made up of NSW Government agencies.

This proposal is inadequate because of the conflict of interest that the NSW Government has with the Cobbora mine being a state-owned project.

Any committee formed to provide expertise in decision making around the ecology of ephemeral streams and permanent pools must have independent scientific input.

The groundwater assessment has identified that at least two deep permanent pools in the creek systems will be impacted through loss of base flows. The aquatic management strategy as outlined in Preferred Project Report Appendix F considers the making of freshwater releases into the affected streams.

The availability of water from the mine during periods of dry weather, when permanent pools will be most impacted, has not been identified. The water balance predictions have indicated that a dry period during year 20 of mining operations will possibly cause a water shortage.

The ability of the mine to supply freshwater to affected deep permanent pools cannot be assured.

The Preferred Project Report identifies that '*It was observed during drought in 2009 that the creeks were predominantly dry with very few deep pools.*'[2]

This is precisely the concern that IRN has with the additional impacts that the proposed mine will place on the Laheys Creek and Sandy Creek systems.

When the additional impact of loss of base flows is placed on these important aquatic ecosystems during drought, the mine operations will also be competing for water availability.

The Preferred project Report suggests that '*pools will receive increased surface water flows during median and wet years, which may offset the loss of groundwater inflow.*'[3]

This statement completely ignores the fact that loss of base flows will have the greatest impact on deep permanent pools during dry times when there is no surface flow into the pools. This statement also demonstrates a lack of understanding of the importance of these deep pools as drought refugia.

Conclusion

IRN recommends that the Cobbora coal project not be approved because of the likely significant impact on water sources, their dependent ecology and other water users in the Macquarie River catchment area including the Macquarie Marshes.

Yours sincerely

Anne Reeves, BSc OAM
Hon. Secretary

[2] Preferred Project Report Vol 1 p 121
[3] Preferred Project Report Vol 1 p 56

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