

Maules Creek CWA submission: Objections to Idemitsu Resources Australia Boggabri Coal mine Project Approval Modification Environmental Assessment (MOD 5) 20 November 2015

1. INTRODUCTION

1.1 Who is Maules Creek CWA

Our Branch was initially formed in 1923. We are local women with a wide network. We are concerned about the present and future health and well being of our community and environment. We believe our community is at risk now and into the future from unsustainable developments.

As country women we are primarily concerned with preserving and fostering the sustainability of rural communities. The advent of coal mining in the Boggabri/Maules Creek regions has caused the loss of 66 farms to mine ownership, replacing active community members and farmers with mine employees and others tenants who have not assumed permanent community commitments such as volunteer fire fighting etc. This has also dramatically reduced the agricultural productivity in the area.

Daily our members are facing serious and undeniable environmental problems - noise and dust - that were predicted in numerous submissions at the time of the Boggabri coal mine expansion approval 09_0182 in 2012. Nevertheless the expansion was approved and now seeks to increase its water extraction by developing a new borefield, and obtaining water licences to aquifer and surface water.

We are very concerned about the impacts of climate change drivers – their emissions and their activities on all the communities in the world. In this instance we are concerned about rural community resilience, rural Australia's water needs, particularly the Great Artesian Basin, specifically our rivers and groundwater and the recharge zones in the North West.

We are also concerned that in light of the world's very recent consensus that fossil fuels must stay in the ground, that all individual Government decisions going forward will be seen as market signals. We believe that all signals going forward from NSW Planning and Environment must reflect the world's call for real climate actions- not just discussions of emissions reductions and carbon credits. Department of Planning and Environment must demonstrate REAL CLIMATE ACTION and put vulnerable communities and environments first as the world transitions to renewable energy.

Companies like Boggabri Coal which submit false modelling to the NSW Government in order to secure planning approval should not be rewarded a mere three years later with the approval of Modification 5 (MOD 5).

2.2 MOD 5 is a high risk modification

We are making a submission because it impacts the ability of this area and the North West to be resilient going forward. The MOD 5 is a new, high risk extension to the Boggabri Coal mine's operations which is being sought by Idemitsu Resources despite the fact that there is no **Leard Forest Mine Precinct Water Management Strategy** as prescribed by condition 38(d) of Major Project Approval 09_0182. MOD 5 has potentially catastrophic, irreversible consequences to the

groundwater in Zones 5 and 11.

In considering MOD 5, the NSW Government should consider the poor environmental track record of Idemitsu, with some large fines and serious breaches of its approval conditions to date.

These factors should invoke the Precautionary Principle, as required by the legislation.

Despite the PAC's specific requirement that the Leard Forest mining precinct be planned as a whole rather than 3 (or 4 if the Goonbri coal mine project proceeds immediately adjacent to Boggabri Coal in the Leard forest) separate projects, none of the key strategies has been implemented.

It is widely known that the water crisis now affecting Boggabri Coal is impacting on the mine's ability to manage airborne dust and the CWA is reliably informed that dust suppression activities are curtailed due to the water shortage. However, this should not be considered an adequate justification for approving MOD 5.

Previous CWA submission about air quality impacts of Maules Creek and Boggabri extension Major Projects have been vindicated.

2.3 No further modifications until Boggabri Coal complies with existing conditions

Essentially Maules Creek CWA is demanding no further approval of changes to biodiversity offsets or water entitlements until all of the regional strategies are completed and approved in accordance with the Boggabri Coal Major Projects Approval.

2. KEY CONCERNS

2.1 Idemitsu is unable to reliably predict their water consumption

- Mining at Boggabri mine began in 2006, and in 2012 the production rate was increased from 5-7mtpa.
- The application makes clear that the 2012 approval to expand was made without due consideration of the water needs of the project, and that the proponent has now "identified a number of adjustments and additions to previously approved operations that are required to ensure its efficient continuous operation"

2.2 Boggabri Coal are in deficit for half of their water demand

- Idemitsu Boggabri Coal seek approval to modify their consent to create six new bores. Two to supply water for the mine, and four "contingency" bores because they find they need 9.5ML per day to run the mine.
- So far, they have used run-off, pit inflow and Namoi River water, but have a site deficit of 4.7ML per day - half their water demand.

2.3 NSW Govt should not compensate Idemitsu for its flawed modelling of water usage

- During planning stages and in their EA Boggabri Coal dramatically underestimated their water needs and it is not for the NSW Government to carry the burden of this error. Those who are responsible for the flawed modelling should be held accountable and not have their approval conditions changed at the inconvenience of those around the mine.
- If the water usage is so far removed from what was originally proposed by Idemitsu, this suggests the project never was approvable at the outset.

2.4 Boggabri Coal do not have adequate aquifer licences

- We understand from this MOD 5 application that Boggabri Coal do not have aquifer licences to meet their demands. They say they are in the process of obtaining them. Currently, they have 848ML of aquifer licences, at full availability. Their Namoi surface water entitlements could yield them 229ML per year.
- This leaves a deficit of 1,015-1,570ML. And Boggabri Coal want to drill a borefield to supply this. The bores will be on Coobobindi, Victoria Park, Roma, Daisymede, Heathcliffe, and Bellevue. We consider the proposed borefield to be a significant impost on the local groundwater system.
- Boggabri Coal claim to have agreements with the landholders of these properties to construct and operate the bores. Their EA says they are "currently reviewing water access licence availability to enable the borefield to operate at maximum capacity, as may be required during extended dry periods".

2.5 Boggabri Coal now seeks additional surface water entitlement

- Further to the aquifer licences they do not have, Boggabri Coal now seeks to obtain additional surface water entitlements - Water Access Licences.
- Boggabri Coal admit they need Water Access Licences for the aquifer, but it seems they should also need them for the Namoi surface water. As a result of this extra extraction, drawdown will extend to the Namoi River itself, with draw down of at least 1m and perhaps over 2m occurring

over a 3.8km section of the river. This means there will be lost baseflow to the Namoi, and we believe that there will also be loss of surface water into the ground.

2.6 Listed endangered aquatic ecological community at risk by Idemitsu's own admission

- Endangered aquatic ecological community: Proposed modification study area occurs on the floodplains of the Namoi River and the community of River Red Gum woodlands and forests and riparian vegetation along this river. The aquatic ecological community in the natural drainage system of the lower land catchment of the Darling River is listed as endangered under s 220FB the *Fisheries Management Act 1994*. (APPENDIX C, p 29ff, especially at Par 4.1.2.3)

2.7 No reference is made in MOD 5 to Key Threatening Processes affecting aquatic EC's

- Boggabri Coal fails to mention at par 5.6 of Appendix C under the subject **“Key threatening processes” (KTPs)** that MOD 5 poses KTPs to an ecological community listed under *Fisheries Management Act*. We call on the Dept of Planning to establish whether this is an accidental omission, or whether Idemitsu regards MOD not to constitute threats to the survival, abundance or evolutionary development of the ecological community. Certainly no evidence was presented in the Environmental Assessment for MOD 5 one way or another. Either way, this is not a precautionary approach to managing a listed endangered ecological community.
- We refer the proponent and the Dept of Planning to Sch 6 of the *Fisheries Management Act* which lists KTPs as including:

“Degradation of native riparian vegetation along New South Wales water courses”
(admitted by the Proponent and by Niche Environmental Consultants in Appendix C)

and

“Installation and operation of instream structures and other mechanisms that alter natural flow regimes of rivers and streams” which is unambiguously what will occur under MOD 5.

2.8 Changes to Boggabri Biodiversity Management Plan and Offset strategy being sought in isolation from regional strategy

- Construction of the MOD 5 pipeline and wells will cause loss of vegetation and habitat and will remove 7.7 ha of native understory vegetation within previously identified offsets (APPENDIX C, P 43 PAR 5.2 “Modification areas within offsets”)
- Due to the fact that Whitehaven Coal and Idemitsu Resources have failed to deliver an acceptable **Leard Forest Mine Precinct Biodiversity Strategy** (also known as the **“Regional Biodiversity Strategy”**), the proposed removal of 7.7 ha of habitat is being sought in isolation of other vegetation loss currently underway following piecemeal approval by the Dept of Planning, including:
 - (i) Revised Maules Creek coal mine Biodiversity Strategy dated March 2015, approved October 2015 which is substituting higher biodiversity value property Blue Range for lesser biodiversity properties Oakleigh and Rose Glass;
 - (ii) Therribri Rd upgrade by Whitehaven Coal in conjunction with Narrabri Shire Council, which has decimated large swathes of vegetation in Harparary and on the banks of the Namoi River crossing, as well as Aboriginal heritage.

2.9 Water trigger under EPC Act (Commonwealth)

- Despite the protestations of Idemitsu, this MOD 5 most definitely requires assessment under the water trigger introduced by the *Environment Protection and Biodiversity Conservation Amendment Act 2013 (Commonwealth)*.
- The definitions of large coal mining development in the *EPBC Act* (under which the Boggabri Coal expansion was assessed for its biodiversity impacts) require the significance of the impacts of an action to be considered with other developments, whether past, present or reasonably foreseeable.
- As shown below, the Leard Forest Coal Mine Precinct has failed abysmally, and cumulative impacts are proceeding without the intended strategic planning. In an area of high water use, such as the North Eastern tip of the Liverpool Plains agricultural area, this would be more likely to involve a **significant impact on a water resource**.
- Furthermore, the question of whether the associated water impacts of CSG and open cut coal mines come within the Water Trigger is the subject of legal action right now and no decision of MOD 5 should be made until this matter has been decided (*People for the Plains v Santos*).

3. OVERRIDING CONSIDERATIONS

Maules Creek CWA believes the following overriding considerations must be considered by the authorities in their assessment of MOD 5.

3.1 PRECAUTIONARY PRINCIPLE

The precautionary principle is a decision-making mechanism which emerged in the late 1980s and 1990s with an emphasis on anticipating and predicting harm from planned activities which involve serious or irreversible damage to the environment. In Australia the definition given in the intergovernmental agreement on the environment in 1992 by all heads of government in Australia, has been employed in New South Wales environmental and planning legislation.

The *Environmental and Planning Assessment Act 1979* states that the determining authority has a duty to consider environmental impact. Section 111 provides that:

“For the purpose of attaining the objects of this Act relating to the protection and enhancement of the environment, a determining authority in its consideration of an activity shall, notwithstanding any other provisions of this Act or the provisions of any other Act or of any instrument made under this or any other Act, examine and take into account **to the fullest extent possible all matters affecting or likely to affect the environment by reason of that activity.**” [Emphasis added]

Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* further defines the responsibility of the Secretary, Department of Planning and other consent authorities or determining authorities including in the case of state significant projects, the Minister for Planning:

(4) The principles of ecologically sustainable development are as follows:

(a) the **precautionary principle**, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:

(i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and

(ii) an assessment of the risk-weighted consequences of various options,

(b) **inter-generational equity**, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,

(c) **conservation of biological diversity and ecological integrity**, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration.

The question is how precautionary should the NSW Government be in determining whether Idemitsu Resources should be allowed access to new bore fields with unknown and potentially catastrophic impacts on the Namoi River catchment?

An element of "careful evaluation" is adequacy of information. It is the opinion of the Maules Creek CWA that MOD 5 does not provide the decision-makers with the requisite information to make a "careful evaluation" within the intent of the New South Wales planning laws.

We say that intergenerational equity has been entirely disregarded in both the planning and regulation of the Leard Forest precinct coal mines, evidenced by the fact that the mines are being allowed to proceed apace and even to modify their consent conditions to the detriment of the environment and to the detriment of intergenerational equity, in the absence of key strategic plans (discussed below).

We believe that it is preferential to apply the Precautionary Principle; as has been applied to local farmers since 2006 over 5 years- with the use of a Section 234 clause on groundwater extraction (*Water Act 1989*).

3.2 ENVIRONMENTAL TRACK RECORD OF NON-COMPLIANCE BY IDEMITSU RESOURCES

In successive years since the Boggabri Coal extension approval, the proponent has been found guilty of successive environmental breaches relating to waste water, illegal clearing of woodland, and emplacement of overburden contrary to its conditions.

Importantly, **these breaches of conditions were not self-reported, which is critical element of self-regulation.**

A summary of offences is below:

November 2013

\$3,000 fine for polluting a tributary of the Namoi River, no "significant environmental harm" but "Boggabri Coal failed to install the necessary controls"

NSW EPA Media release 7 November 2013:

<http://www.epa.nsw.gov.au/epamedia/EPAMedia13110701.htm>

August 2014

The NSW Land and Environment Court supported findings by Department of Planning and Environment inspectors, that Boggabri Coal had stockpiled about 90,000 square metres of excavated material from their open cut coal mine at a disused quarry site outside the mine's boundary.

Boggabri representatives from mine operator Idemitsu pleaded guilty to the offence and was fined \$82,500, and was also ordered to pay legal costs of \$38,000.

As reported in Australian Mining magazine, 27 August 2014:

October 2015

Boggabri Coal received two penalty notices for \$3000 each, firstly for “the clearing of 7.7 hectares of native vegetation outside the approved disturbance boundary,” and then received its second fine for not notifying the DPE of the clearing incident.

This involved removing the understorey, and not the larger trees, as is proposed in MOD 5.

As reported in Australian Mining magazine, 1 October 2015:

<http://www.australianmining.com.au/news/coal-miners-hit-with-fines>

Boggabri Coal was ordered by the DPE to provide an Action Plan for the restoration of the illegally cleared vegetation, but the deadline of 31st October was missed, and it is not known if the company has yet provided the Dept of Planning the requisite Action Plan. We request the Dept of Planning to provide the community with their proposed actions following the failure of Idemitsu to comply with the request for a remedial action plan.

Key factors to be considered in relation to compliance by the proponent include:

- (i) Only a small fraction of breaches and non-compliances are ever fined or prosecuted, due to evidentiary obstacles or the successful negotiation by the errant proponent. This is well known to the NSW EPA and Dept of Planning, which are only able to proceed where there is unlikely to be a costly appeal against the fine or prosecution.
- (ii) Boggabri Coal did not self-report its breaches, but waited for the breaches to come to the attention of the Dept of Planning.
- (iii) The relevant Dept of Planning compliance officer is based in Singleton, and the NSW EPA in Armidale. Even with proposed merging of coal mine compliance functions at Armidale- which is foreshadowed, this is a drive of some hours distance and limits the effectiveness of the compliance officers.
- (iv) In any case, even when conducting spot audits with no prior notice, compliance officers experience delays between their arrival and induction on site and the inspection which allows time for last-minute corrections to be made by the miner.
- (v) Lack of capacity by the Dept of Planning and the EPA to properly regulate the MOD 5 bore fields must be a factor taken into account in considering this modification.

3.3 LEARD FOREST MINE PRECINCT WATER MANAGEMENT STRATEGY

This is required under Sch 3, condition 38(d) of the Boggabri Coal Project Approval.

The precinct-wide Leard Forest Mining Precinct Water Management Strategy is supposed to incorporate the impacts of all three mines currently operating in and adjacent to the Leard State Forest, namely Whitehaven Coal's Tarrawonga and Maules Creek Mines and the Boggabri coal mine.

However, nearly 4 years after approval of the Boggabri mine, this Strategy has never been developed.

The Boggabri Coal Water Management Plan dated February 2014 (the most recent available) provides no commentary on the regional strategy, but refers to it in Table 2-2, p 13 with a note that: "The Leard Forest Mining Precinct Water Management Strategy is being developed in stages and will be subject to ongoing review dependent upon the determination and commencement of other mining projects in the area."

Considering 4 years have lapsed since the approval, this statement is pure bunkum.

A community representative on the Boggabri Coal Community Consultative Committee informed the Maules Creek CWA that they have not ever considered the regional strategy.

Given that cumulative impacts are not only likely, but were foreshadowed by the PAC, the Department of Planning has failed in its duty by allowing four years to lapse and still no regional water strategy for the Leard coal mines. With the lodgment of MOD 5, the time has come for the Department to demand the regional strategy be urgently fast-tracked before it makes a decision on MOD 5.

3.4 LEARD FOREST MINE PRECINCT BIODIVERSITY STRATEGY - "REGIONAL STRATEGY"

This Strategy was due in 2013 and still has not been finalised. The Scoping study for the regional Strategy was lodged in May 2013, however was found to be extremely lacking in key information.

Comments from the Office of Environment and Heritage (OEH) dated 9 July 2013 go so far as to state "it remains unclear what the purpose of the regional biodiversity strategy is meant to be." (ref Stage 1 Scoping Report, Comments from OEH – 9 July 2013, p. 1).

Without a regional strategy in place, the prospect of disturbing 7.7 ha of native understorey vegetation is unacceptable. This is especially so, when the vegetation is on land which forms part of Boggabri Coal's biodiversity offset areas.

The purported regional strategy was even said to contain some misleading information – referring at p 7, figure 2, the OEH said "the offset properties delineated on the figure is slightly misleading – only parts of some of these properties form the actual biodiversity offsets." The Scoping Report was vague and lacking in numerous other requirements, such as lacking a communications plan as per condition 40 EE (bog bright) and condition 40 1E (Maules Creek).

The purpose of the regional biodiversity strategy was set out by the New South Wales Planning Assessment Commission (PAC): "The strategy will need to set out the long-term framework of management, monitoring and land use security to be applied consistently across all biodiversity conservation areas in the region." (PAC 2012)

However, Idemitsu's own failures to properly predict its water usage a mere three years after the Boggabri coal extension approval, is causing it to revise its land use requirements with distinct cumulative impacts on regional biodiversity.

Clearly there is a need for the long-term framework, and MOD 5 should not be approved until the framework has been properly consulted and approved.

3.5 LACK OF COMMITMENT OF WHITEHAVEN & IDEMITSU TO WORK TOGETHER AS A PRECINCT

The management of cumulative impacts on the water table and biodiversity depends on the ability of Whitehaven Coal and Idemitsu Resources to work cooperatively and to balance their own corporate needs in the interests of minimising cumulative impacts.

Schedule 5, condition 6 of the Boggabri Coal approval is titled "**Management of cumulative impacts**" and states:

"In conjunction with the owners of the nearby mines in the Leard Forest Mining Precinct, the Proponent shall use its best endeavours to minimise the cumulative impact of the project on the surrounding area to the satisfaction of the Director-General."

However, we have observed that the "best endeavours" of Whitehaven Coal and Idemitsu resources do not favour the interests of minimising cumulative impacts.

As an example, we refer to the failure of the two companies to arrive at a mutually satisfactory agreement on the use by Whitehaven of the Boggabri haul road despite protracted negotiations.

The result is there for all to see at Therribri Rd and the Namoi River crossing, where Whitehaven Coal has decimated woodland in the course of widening the road, an intensification of the mining activities that would not have been necessary if the companies were able to cooperate.

If it were demonstrated that the companies did use their best endeavours to manage cumulative impacts, this points to a failure of the test of best endeavours in achieving sustainable development.

The following pictures illustrate the results of the lack of cooperation between Idemitsu and Whitehaven Coal. Here we see incremental loss of vegetation including endangered ecological community, and no concern for cumulative impacts.

Figure 3.1 Eucalyptus populnea woodland damage caused during road widening by Whitehaven Coal.



Figure 3.2 Eucalyptus populnea woodland damage caused during road widening by Whitehaven



Coal

Figure 3.3 Myall Woodland Endangered Ecological Community damaged due to road widening by Whitehaven Coal, unable to reach agreement on using Boggabri haul road.



To conclude this point, if there had been a Regional Biodiversity Strategy in place as stipulated by the approval conditions of both the Boggabri extension and the Maules Creek mine, it would have satisfied other OEH requirements provided in the response of 9 July 2013 referred to above.

3.5 MOD 5 must be referred to Commonwealth under Water Trigger

Significant Impact Guidelines for the Water Trigger may be found at <https://www.environment.gov.au/resource/significant-impact-guidelines-13-coal-seam-gas-and-large-coal-mining-developments-impacts>

The Guidelines state that an action is likely to have a “significant impact” on a water resource if there is a:

“real or not remote chance or possibility that it will directly or indirectly result in a change to:

- the hydrology of a water resource; or
- the water quality of a water resource,

that is of sufficient scale or intensity as to reduce the current or future utility of the water resource for third party users, including environmental and other public benefit outcomes, or to create a material risk of such reduction in utility occurring.”

Maules Creek CWA believes the opinion of Idemitsu and Boggabri Coal, who are in deficit for half of their daily water requirements due to their own incompetent predictions, is of no credibility in predicting the risk of a "real or not remote chance or possibility" that MOD 5 will have irreversible impacts of the kind the Water Trigger was legislated to address.

Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted. It also depends upon the intensity, duration, magnitude and geographic extent of the impacts. More information on what amounts a significant impact is at [Significant Impact Guidelines 1.1: Matters of National Environmental Significance](#). A significant impact on water resources may be caused by one development action relating to coal seam gas or large coal mine, or the cumulative impact of such actions.

However, Idemitsu states in the MOD 5 EA Main text (at par 4.2, p 21)

“Under guidelines actions approved under Part 9 of the EPBC Act prior to 22 June 2013 are exempt from the water resource triggers. *The impacts to water resources from mining at the BCM were approved under Part 9 of the EPBC Act in February 2013* and are therefore exempt from the water triggers of the EPBC Act.

As the proposed modification does not involve the extraction of coal, it is not considered relevant to the water resource triggers of the EPBC Act.” [Emphasis added]

We strongly oppose this statement, and wish to address both of the statements contained in the above quote.

Firstly, due to the fact that MOD 5 represents a major expansion of the project that was most definitely not anticipated at the time of the 2013 approval, the impacts cannot be said to have been approved because the volume of the new borefield extraction, both aquifer and surface water, are of such a high percentage above the anticipated usage.

The question is, what would the opinion of consent authorities have been if it had been known in 2012 – 2013 that the water usage would be a full 50% more than what the proponent had put forward in its environmental assessment?

Secondly, the question of whether MOD 5 involves the extraction of coal is the subject of legal proceedings underway in relation to the Santos Pilliga gas project. We support a wider interpretation of the intent of the Water Trigger. There would have been no purpose in legislating the Water Trigger and requiring it to applied to open cut coal mining if it were not for the recognition that massive amounts of water are needed for coal washing and dust suppression at mines. This is obviously a matter for legislating interpretation which is underway and should not be foreshadowed by decisions on MOD 5 in the interim.

Water is essential to the business of extracting open cut coal because management of coal dust is an essential feature of coalmine regulation.

3.6 ADEQUACY OF THE ENVIRONMENTAL ASSESSMENT

The *environmental planning and assessment regulation* 2000, Sch 2 lists the requirements of environmental impact statements. At clause 7 (f), the Regulation states that the environmental impact statement must include economic and social considerations, including the principles and ecologically sustainable development set out in subclause (4):

(4) The principles of ecologically sustainable development are as follows:

(a) the **precautionary principle**, namely, that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. In the application of the precautionary principle, public and private decisions should be guided by:

- (i) careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment, and
- (ii) an assessment of the risk-weighted consequences of various options,

(b) **inter-generational equity**, namely, that the present generation should ensure that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations,

(c) **conservation of biological diversity and ecological integrity**, namely, that conservation of biological diversity and ecological integrity should be a fundamental consideration,

(d) **improved valuation, pricing and incentive mechanisms**, namely, that environmental factors should be included in the valuation of assets and services, such as:

- (i) polluter pays, that is, those who generate pollution and waste should bear the cost of containment, avoidance or abatement,
- (ii) the users of goods and services should pay prices based on the full life cycle of costs of providing goods and services, including the use of natural resources and assets and the ultimate disposal of any waste,
- (iii) environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structures, including market mechanisms, that enable those best placed to maximise benefits or minimise costs to develop their own solutions and responses to environmental problems.

MOD 5 is virtually silent on the above.

4. OBJECTIONS TO MOD 5

4.1 INSUFFICIENT CONSULTATION

Changes of this magnitude in the short space of 3 years since approval in the life of a 30 year coal mine suggest that Idemitsu has failed entirely in predicting its water usage and more representation from the broader community is needed to ensure full scrutiny of all of its plans and modifications.

We believe MOD 5 consultation has been too limited for such a Modification to a State Significant Project's Consent Conditions.

Our objection on the ground of insufficient consultation starts with the fact that two weeks is an inappropriately short period for public exhibition and consultation.

The CWA spoke to 2 hydrogeologists who indicated they would have liked to lodge a submission but due to the very short timeframe, and the fact that the lodgment is immediately prior to the Christmas season, they are unable. It would seem, therefore, that the consultation and exhibition period for MOD 5 will suffer from the absence of expertise.

We question why a two-week exhibition period is considered appropriate for such a complex project, especially in the lead up to Christmas when the application is likely to sit idle until public servants returned to work after the New Year.

Also, the complexity, uncertainty and risk associated with MOD 5 warrants thorough consultation within the Boggabri Coal Community Consultative Committee (CCC). This has not occurred.

The following represents the official community consultation process as minuted by Boggabri Coal in their official Community Consultative Committee minutes.

From the Boggabri Coal CCC meeting minutes 19/5/15):

Community Rep and farmer (AT): Asked how much water we need

Boggabri Coal (HR): 4-8 mega litres a day if we have no rain fall.

Fragments of information such as these are all that is recorded in the way of community consultation. This is unsatisfactory.

A perusal of the Boggabri CCC minutes on the website reveals questions asked by community members, but does not provide answers to those questions except in broad generalities, nor does minute or attach relevant written responses. In short, community consultation does not even rise to the minimum level required under the NSW Government *Guidelines for the Management of CCC's*.

No recognised environmental group has been participating in the community consultation process as requested by the Dept of Planning, due (according to Idemitsu) to the spurious claim that they advertised repeatedly for such a representative and no one came forth to apply for the role.

In the meantime, other members of the community have requested representation but the barriers are high to entry. This is not the intention of the Guidelines.

An aid in understanding what is expected of community consultation is the OEH's response to the Leard Forest Mine Precinct Regional Strategy, which stated (at p 3):

"21. Community consultation: Should explore the potential for the information listed to be delivered to a wider component of the community rather than just the CCC."

4.2 MODIFICATION 5 IS A THREAT TO CROP PRODUCTION

From two bores of 4-8 mgl/day to up to 6 bores with 18 megalitres/day available (but needing 9ML) especially in dry times is unacceptable. For local families, the North West is a long term proposition. For mining companies it is only a relatively short term business model.

The amount of groundwater asked for (detailed below from Applicant) and required is too extensive and will threaten the sustainability of local crop production.

Mitigation: "Groundwater users who are impacted by the modification are subject to the 'make good' provisions of the Aquifer Interference Policy, which requires Boggabri Coal to provide access to an equivalent supply of water through enhanced infrastructure or other means, such as deepening existing bores, funding extra pumping costs or constructing new pipelines or bores. "

"The groundwater users who may be subject to drawdown impacts use their bores for stock watering, with one bore being used intermittently for irrigation. As these users are to be subject to the make good provisions of the aquifer interference policy and will be provided with alternative water supply if drawdown impacts occur, no impacts to their operations are anticipated." Appendix B p 51.

But Maules Creek CWA are concerned whether this works in practice? We refer again to the unpleasant issues raised by Whitehaven Coal's Werris Creek surrounding bores. UNSW Groundwater studies have raised very serious concerns of potential impact from mining on groundwater.

Maules Creek CWA believe that the "Make good" agreement clauses are inadequate in light of the stress currently placed on the Australian landscape and the North West specifically. There is neither the physical opportunity and potential, nor a demonstrated commitment, to "make good" (we remind the Dept of Planning that Boggabri Coal were instructed to prepare a plan to "make good" the illegal clearing that occurred in February 2015, and did not fulfill the 31st October deadline, and to our knowledge some general statements have been made at the Triple C meeting in November but the Plan has not been submitted yet, so promises that Idemitsu will make good are not credible).

As safeguards the mitigation agreement is inequitable- because it removes non-mining landholders certainty and self-sufficiency. Rather it is making them dependent on mining companies ability or the community's ability to attribute the responsibility for impacts. The Werris Creek Mine is currently under review and in dispute with local landholders. The dispute highlight what can happen in terms of determining responsibility in a timely manner. For local water users to have faith in the Planning System, the precautionary principle must apply in the case of this application.

Rather than the application of "Stringent conditions" that simply removes non-mining water users confidence in their ability for certainty in future water accessibility.

BOGGABRI COAL MODIFICATION 5 PG. 16 TABLE 3.5 PROPOSED BOREFIELD

Bore	Operation use	Status	Expected achievable maximum pumping rate ¹ (ML/day)
Cooboobindi	Production	Test production bore	7-7.5
Victoria Park	Production	Test production bore	3.4
Daisymede	Production	Existing production bore	1

Roma	Contingency	Test production bore	4.5
Heathcliffe	Contingency	Test production bore	1.5
Bellevue1	Contingency	Test production bore	1
Bellevue 2	Contingency	Test production bore	0.5

(1) Based on field testing (Parsons Brinckerhoff, 2015b)

Maules Creek CWA consider this application presents an uncaring grab at a precious local, shared resource. Boggabri Coal need another 2,082ML per year to meet their demand in average conditions. But in dry conditions, when the landscape is completely parched they are asking the government to give them up to 2,600ML.

According to the Boggabri Coal Modification 5 Application, “The cone of depression will cause water levels in landholder bores (includes concrete lined wells) to decline. For each scenario, the modelled drawdown at affected landholder registered bores was identified. The Aquifer Interference Policy (AIP) quotes a threshold for key minimum impact considerations of 2m for groundwater supply works.”

While “Scenario A relates to operation of the borefield under average rainfall conditions (5.7 ML/day total abstraction), while Scenario B simulated an extended dry period during which additional groundwater may be required (up to 9.4 ML/day in total).” Appendix B p 3
<https://majorprojects.affinitylive.com/public/1c25a98f5962d70a97e70c5e2375c26d/03.%20Boggabri%20Coal%20Project%20MOD%205%20EA%20-%20Appendix%20B.pdf>

It is the B-scenarios (as detailed in Appendix B), where obviously the concerns are greatest. This is especially so, in the light of unreliable future rainfall and the potential for climate change creating persisting water shortages.

Worst case scenarios due to increased pumping and dry conditions are treated casually, such as the potential of catastrophic impacts on agriculture in the affected areas which rely on aquifers and the replenishment of surface water to their bores:

“Five shallow, active concrete lined landholder wells would potentially become dry or be subject to reduced supply under all scenarios. These groundwater works are located on the Brighton, Glenhope, Billabong and Nardeeneen properties and use very shallow groundwater that would be drawn down by less than two metres.” Appendix B, p 50.

Maules Creek CWA think this undermines the resilience of our community, the environment and it is unacceptable that six active landholder bores or wells would experience a drawdown between two and five metres. Note this does not include unused or abandoned bores and those owned by or leased to Boggabri Coal.

The long term reality is that coal companies will move on. It is the community that will be left with the fall out. This will occur in 27 years, or less if the Boggabri Coal mine becomes a stranded asset due to global energy innovation or other factors. Indeed we are also concerned that when they are gone that “care and maintenance” will prevail and plans to rehabilitate will be foregone. Again, this issue of viability must be considered in the context of a world in transition and not the MOD 5 in isolation.

4.3 CUMULATIVE IMPACTS

We believe that the loss of groundwater undermines the Maules Creek community's ability for resilience in a time of increased climate change. We believe that any increase in Coal mining is not compatible if it requires further interference with groundwater.

The cumulative impact on local water users is negative and not right. According to the Boggabri Coal Modification Application 5, "Cumulative drawdown- Three coal mines operating in the hills over 5km east to northeast of the alluvial borefield (refer to Figure 1.1) have potential to cause drawdown to extend into the alluvium from development of the pit voids. These coal mines are:

■ Maules Creek ■ Tarrawonga ■ Boggabri.

Previous modelled cumulative drawdown impact assessments for the Boggabri, Tarrawonga and Maules Creek coal operations undertaken by Heritage Computing (2012b) and AGE (2011) show drawdown extending into the alluvium at the base of the foothills east to northeast of the borefield (refer to Appendix G for plans).

This is estimated to be an additional groundwater drawdown of 1-2 metres under A Scenarios and 1-3 metres under B Scenarios in the alluvium to the east and northeast of the borefield where mine cumulative drawdown is experienced (refer to Appendix B for further details).

This is not acceptable and poses unnecessary risk at going forward.

4.4 TAILINGS DAMS AND ADEQUATE COMPLIANCE

We are concerned that Boggabri coal Tailings Dams have not been designed for containing groundwater flows. Tailings dams were built to hold water from run off-not to hold ground water.

The local community's awareness of any change to the works on dams at Boggabri Coal are limited to the following exchange at a CCC meeting.

Boggabri coal CCC 3/3/15 minutes: "DM for Boggabri Coal: "Boggabri Coal are increasing the size of 2 sediment dams which will be used to control sediment from cleared areas and water caught as part of this will be used for dust suppression. Water will also be produced by a bore field and harvested from the river."

We question how is an under resourced Armidale EPA to monitor levels in storage dams? As mentioned earlier, we see a lot of breaches with companies complying to notification.

Our concerns are of unacceptable risk. For example:

- The concentrating of water in bottom of dams. The cleaning of tailings, the maintenance of dam structures. We believe best practice determines the sludge is meant to go to landfill. We are concerned about overflows into river at times of flooding.
- As mentioned earlier, dams have ben designed to receive surface water run off only. In flood times pollution of rivers and waterways will occur as has occurred 7/11/13 <http://www.abc.net.au/news/2013-11-07/epa-prosecutes-boggabri-coal/5076524> -" **EPA prosecutes Boggabri Coal: Boggabri Coal failed to install the necessary sediment and erosion controls**" said EPA's Gary Daveys.

4.4 TRANSPARENT, INDEPENDENT MONITORING OF GROUNDWATER ECOLOGY

We are concerned about the impacts to groundwater levels towards the Maules Creek Catchment and in Zone 5. We understand that any impacts on Zone 11 particularly from the Heathcliffe bore will potentially put the groundwater ecology at risk.

Our concern is for a fragile aquatic ecosystem and maintaining the health of the semi-permanent groundwater discharge. The following summarises the GDE we value highly and must protect.

“Semi-permanent groundwater discharge from a location in Maules Creek, in the Namoi catchment, keeps flow in the system through most droughts. The water flows downstream for approximately 8 kilometres before being lost back to the groundwater system. These waters are certainly an important groundwater dependent ecosystem (GDE) and may be a biological refuge for stygofauna. Stygofauna are a new classification of animals that live with groundwater systems including alluvial sediment and in limestone groundwater systems.

Stygofauna are generally small invertebrates, with various species of crustacean have been recorded in aquifer systems of Western Australia and New South Wales. Insects, gastropods, and worms found in groundwater systems are also considered to be stygofauna. However, little is currently known about the ecology, life-cycle and significance of stygofauna and so patterns of distribution and endemism are not known.”

<http://www.connectedwaters.unsw.edu.au/research/projects/groundwater-dependent-eco-system-studies-maules-creek>

4.5 SIMULATED MINE SITE WATER BALANCE

Why wasn't a proper site water balance required before a large mine was given approval?

The “Simulated annual mine site water balance” (at Table 3.2, MOD 5 EA Main text) is impossible to analyse and verify unless raw data is provided showing how the assumptions have been arrived at. The CWA calls on the Dept of Planning to make the assumptions available so that independent analysis can be done to verify the modelling.

Boggabri Expansion Approval 2012 in their Statement of Commitment claimed they had the water balance correct. It now appears clear they have gained an approval using inadequate modelling.

The assessment material makes it clear that the company dramatically underestimated its water needs in the initial assessment. Haul road dust suppression was estimated in the EA for the expansion to be 1.7ML per day, but in fact Boggabri Coal now admits it needs 4ML per day, the same revision has been made for coal washing and dust suppression.

This is not unusual. Look also at the case of Watermark, Liverpool Plains coal project. The DoPE have agreed that they have underestimated their water needs.

Companies shouldn't be given approval when in the Planning stages the government knows their modelling is inadequate and they openly doubt the predictions of water usage.

The Department must follow through on their own position that it is the companies taking the risk. Therefore in this case the DoPE must uphold this position. Their obligation is to the sustainability of Australia and therefore companies should shut down in times where they can't operate under their approved conditions.

4.6 TOXICITY CONCERNS

We have concerns that the waste water is being used on roads could be toxic.

From Boggabri coal CCC 19/5/15 minutes, (community rep and farmer) RG asked “what the bore water was used for.”

The Boggabri representative replied that they have “3 sources that they obtain water from – river allocation, rain collection and bore water. Generally they operate on recycled water, before obtaining fresh water from either the river or bore network.”

Boggabri coal CCC 11/8/15- Community Rep (GG) asked how and what water is used to control dust.

(DM) for Boggabri Coal: “Water is used by various haul trucks to spray the operating running surface and open areas that could generate dust. “

There are also concerns that coal is not being washed and the potential impacts this has on communities along the coal delivery railway line and in Newcastle. This concern does NOT mean the CWA condones the diversion of water away from agriculture or environmental flows. It merely points out that the mine is not operating in an acceptable way.

4.6 POWER SUPPLY TO NEW BORES

The Boggabri Coal Mine Project Approval Modification EA refers at par 3.3.1 “Power lines and pipelines” to “support poles” being installed into holes bored by a truck mounted augur to depths of up to 5 m. Construction of the power lines will pose impacts which are not fully referred to in the EA. for example, reference is made to the clearing of vegetation, but not to the damaging of vegetation caused by emplacement of overburdened from excavation of trenches.

There also appears to be uncertainty about access to the local power supply network and what would be involved in accessing power.

In response to a question on how the bores would be powered, (HR), a Boggabri Coal representative presenting at the 19 May 2015 CCC meeting, told the community: “ it will depend if they can be connected to local power supply network.”

It appears that no consideration has been given to the possibility of renewable energy being used.

The CWA is concerned that insufficient detail has been provided about power supply to the proposed bore field as the construction impacts of connecting with local power supply have not been properly considered. Any new power lines could have a cumulative impact on biodiversity and therefore more needs to be known about power supply to the new borefield before approval is given.

More detail is needed about the proposed powering of the bore pumps before decisions are made. The details need to be put out for public exhibition as part of an amended MOD 5 application and openly consulted. It will not suffice for the Dept of Planning to simply impose conditions, as we know from painful experience that the Department is largely unable to enforce its own conditions. (We refer to ongoing controversy concerning noise exceedances at the nearby Maules Creek coal mine.)

4.7 ECONOMIC COST

In terms of opportunity costs, the water has more productive uses- ecological sustainability, climate resilience and food production.

The economic benefits of this to the community and the State would be that non-mining industries have water security and therefore the ability to maintain high needs food and fibre production.

The benefit of this is a local stabilised economy and future sustainable jobs and communities, therefore maintaining healthy places for Australian's to live and work.

Maules Creek CWA believe that it is reasonable that for sustainability of local water supplies to the non-mining community, the mine should shut down if it does not have the water to operate. It should stay within its approval conditions.

Sustainable farming and tourism are being placed at risk for the sake of a 30 years maximum economic gain by a foreign-owned company, i.e. Idemitsu.

We already have first-hand accounts of tourism operators being requested paddling tours on the Namoi unable to fulfill this demand not purely because of weather factors, but because of the unfair leniency given to coal mining companies to draw unsustainable and unmonitored amounts of water from the Namoi catchment.

Maules Creek CWA believe that the Dept of Planning should review the requirements of State Significant Development planning in light of the climate crisis.

The mine is a State Significant Development, still operating under Part 3A "transitional arrangements" they do not need a water supply work approval to construct these bores, nor do they need to comply with clause 36 of the Upper and Lower Namoi Water Sharing Plan, which prevents water supply works being constructed within 200m of property boundaries.

However this seems ridiculous in light of Paris Climate Talks and the need to protect as much of Australia as possible from being sterilised against future agriculture or tourism. And indeed encouraging a growth or at minimum maintaining food production as an important step towards food security.

5. CONCLUSION

We are of the view that MOD 5 is not able to be decided on for substantive reasons listed above which are based on information available, plus we believe that the MOD 5 EA does not satisfy the *environmental planning and assessment regulation*, Sch 2.

We now call on the Secretary, Dept of Planning, to abide by Sch 2 and require Idemitsu and Boggabri Coal to provide further particulars before considering MOD 5, as per:

12 Environmental assessment requirements for State significant infrastructure

In preparing the environmental assessment requirements with respect to an application for State significant infrastructure, the Secretary:

(a) may require the responsible person to provide further particulars ...

In particular, we call on the Secretary to require the applicant to provide:

- Full assessment of the intergenerational impacts of MOD 5, as well as all of the requirements of Sch2, cl (7) (4)

- Immediate fulfilment of the requirement of submitting Regional Water and Biodiversity Strategies – if these cannot be provided within a short term, after years of deliberation, it can be taken that the Leard Forest Mine Precinct is unworkable and alternative regulation of the Leard Forest mines be immediately considered
- Public availability of all assumptions on which MOD 5 modelling is based, to enable expert scrutiny
- Immediate review of the Boggabri CCC, its membership, the adequacy of its proceedings and observance of accepted meeting practices
- Amend MOD 5 to referred to Key Threatening Processes concerning endangered aquatic ecological communities
- Provide details of proposed power supply, including potential impacts of building powerlines on biodiversity

Maules Creek CWA

15 December, 2015

