Supporting Sustainable Water Use in the Namoi Catchment

Namoi Water

The preservation of sustainable resources for agriculture – including water – must be absolute in addressing mining exploration or operational licence applications.

Introduction

Namoi Water is the peak industry group for irrigated agriculture in the Peel, Upper and Lower Namoi valleys in the North West of NSW. We are non-profit non-political organization supporting our members to achieve a sustainable irrigation industry that meets the environmental, economic and social needs of our local communities. Namoi Water as the peak water entitlement holder group represents approximately 1000 members. Entitlement holders within the catchment vary in size from single employee operations to businesses employing around seventy employees.

The agricultural activities range from grains and pulses such as sorghum, wheat, soybeans, peanuts, corn, lucerne, vegetables and cotton, to water used for intensive animal production and a variety of niche market food products. The direct contribution to our economy is $800 million per annum. We are one of the most experienced valleys in terms of water reform, having entered reform in NSW several years prior to other valleys. The Namoi has pioneered the NSW industry response to water reform and we apply this experience to the current challenges of mining expansion in our area.

The Namoi Catchment Water study is currently collating data from government, mining and CSG companies to produce a regional model to assess the risks of coal mining and coal seam gas activities in our catchment on water resources. The models will be run using a number of scenarios (7 – in this project) to assess impact. The phase II report has highlighted there are data gaps and these are highlighted in our submission. Data Gaps are a critical flaw in the development of this industry in any region to assess impact.

Namoi Water is committed to continue working towards better information exchange between our industries, and lobby government for appropriate safeguards to consider long term and accumulative impacts prior to approval being provided. Our aim is to seek regulation to protect the water resources our industry is dependent upon and upon which the food and fibre this State needs now and for the future. If the water resources cannot be safeguarded then this industry must not be allowed develop in NSW. There should be an immediate moratorium on any further licences or approvals, until the system is reformed. The Namoi Water study and scenario model runs must be completed prior to granting licences.

It is vitally important that the Tarrawonga Coal Project identify and investigate any potential detrimental environmental impacts resulting from their planned operations in and around the surrounding agricultural land. Before the project is approved any potential risks to the water resource from their practices must be identified and reduced or removed prior to commencement of mining operation.

Our concerns are primarily the continued lack of calibration, verification, sensitivity analyses an uncertainty analyses within models submitted to planning processes. Reports completed can therefore only be directed by assumptions fed into the model by the modeller, which is a subjective assessment and does not cover the full scope of scenarios either best or worst case. The primary risks of impact are focused on the alluvial system yet the connection between alluvial and bedrock systems is not well explored either through field testing, literature review, water level gradients and model sensitivity assessment. There is a lack of field studies, pumping tests and model sensitivity and these must be completed prior to mine approval. The cumulative impact should consider the declining water levels within the alluvial systems along with the impacts of the surround mines currently presented. Clear methodology for assessment of mining related loss of well yield from background yield losses should be defined up front. Questions need to be asked of the modelling extent is it sufficient when used with constant averaging of river levels? Given that the void will act as a Groundwater sink and the salinity is backfilled in the void how confident are the proponents and the department that this will not adversely impact on Groundwater licence holders in the surrounding zones? How are the cumulative impacts measured and accounted for in the assumptions made regarding Groundwater level impacts. Additional monitoring of the alluvial system needs to be in place with triggers set on the precautionary principle to ensure no lasting impact on aquifer interference activities of the mine.

Rainfall data used in the technical report is modelling averages and does not cover the extreme events that are common in the north west. Clear example of mine planning failures recently include both the Boggabri Coal mine site and Narrabri Coal mine site spills after recent rain events that resulted in fines and variations to their approval to pollute.

We question the data supplied for the upper limits of pit flow inferred from dewatering as reported in annual AEMR, how is the surface water inflow calculated in the modelling? The data supplied suggests the mine will operate at water deficit in the water balance calculations this has already been proven to be inaccurate for Boggabri Coal (a nil discharge mine). Is a 22 year model prediction adequate? These issues are not isolated to the Tarrawonga Coal Project Project, they are a common theme across many of the applications currently before the planning department and are a significant data gap to determine the impact of the project on the water resources. Given the recent example of Boggabri coal mine exceeding the 21 year mine life and mine plan and after being granted extension they then required approval to discharge into ephemeral creek system linked to the Namoi River. Is the department confident that this will not be repeated again in future mine planning and management.

In our view this is not the answer to water management for the future. Namoi Water seeks to ensure that mines are properly regulated via licence conditions including appropriate planning for storage, treatment and reuse on site of mine water. Our industry relies on the resource mines consider a waste product, the proponent advises in their application they are altering the alignment of Goonbri creek which potentially will be impacted via reduced quality of surface water due to uncontrolled site runoff, controlled discharges and alteration of groundwater quality affecting base flow in surface water resources. How can we be assured that the water resource protection is sufficient to ensure that during and post mining impacts are avoided when recent incidents point to non compliance with existing licence conditions? The burden of proof for any damage falls to the individual farmer and is beyond any reasonable scope, especially when there is no independent monitoring nor resourcing of departments to provide the checks and balances required to manage large corporate companies and their compliance in regional areas when departmental staff are not based locally.

Whilst the application outlines a plan to minimise harm, and the government has committed to balancing triple bottom line when assessing applications, how can any submission seek to comment on the methodology used to determine if the economic benefit outweighs the localised impacts? The Tarrawonga Coal Project rehabilitation on site is appalling, having recently visited the site and the scarcity of the revegetation, when the mine has at it's disposal significant resources shows considerable lack of will to undertake or the department to enforce compliance of the applicable licence conditions. What water monitoring is occurring and what reporting is submitted and when? What standard is this measured against?

In conclusion given the Namoi Water study has identified a number of issues in addressing cumulative impacts we suggested that application approval be held over until the study results are handed down, there are a number of companies that have agreed to wait until the study is finalised and in the interest of the community, water resources and responsible land management Namoi Water would recommend that Tarrawonga Coal Project do the same.