Submission to the NSW Department of Planning and Infrastructure

Watermark Coal Project Environmental Impact Statement
Agricultural Impact Statement

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EXECUTIVE SUMMARY

NSW Farmers welcomes the opportunity to respond to the Agricultural Impact Statement (AIS) prepared for Hansen Bailey Environmental Consultants as part of the Watermark Coal Project Environmental Impact Statement. NSW Farmers is Australia's largest state farming organisation and the peak representative voice for commercial farm businesses in NSW. Agriculture in NSW is worth approximately $14.5 billion annually. The sector employed over 88 000 people in 2010-2011, accounting for close to 30% of all agricultural workers in the country[1]. Our farmers are custodians of over 70% of the NSW land mass and world leaders in sustainable food and fibre production.

NSW Farmers have summarised some of the key issues that we have with the proponents' AIS in the pages below and made recommendations as to further areas that need addressing. Importantly, we wish to raise the point, from the outset, that there is a serious concern with the fact that the AIS appears to concentrate on agricultural effects within the project boundary areas only, when a project on a scale such as this one will have huge effects on the surrounding agricultural land. This approach calls into question the credibility of the AIS and demonstrates a lack of understanding by the proponents on how this project will have large and wide ranging impacts on not only agriculture, but the wider region as a whole.

[1] Agriculture in NSW (July 2012) – Statistical Indicators 4/12 – NSW Parliamentary Research Service.

SUMMARY OF RECOMMENDATIONS

RECOMMENDATION 1

The *Water Act 2007* and the consequent Murray Darling Basin Plan should be included as key considerations in terms of the regulatory framework for this project. (s2.1)

RECOMMENDATION 2

The proposed 'water trigger' amendments to the *Environmental Protection and Biodiversity Conservation Act 1999* will have a significant impact on this project. This must be considered in the context of the project's regulatory framework. (s2.1)

RECOMMENDATION 3

The proponent's AIS must consider the impacts on agriculture beyond the boundaries of the project area. To focus on effects within the boundary only is alarming and seriously diminishes the efficacy of the entire AIS. (s2.3.1)

RECOMMENDATION 4

Any statistical data referred to in the proponent's AIS should be the most up to date available. Furthermore, statistical data should not be selectively reported from a time when the majority of the state was in drought. (s2.3.2)

RECOMMENDATION 5

The Stakeholder Consultation Process proposed in the proponent's AIS needs a complete review, with a view to markedly widening the stakeholders involved. (s2.4)

RECOMMENDATION 6

The risk assessment process put forward in the proponent's AIS is seriously insufficient. . NSW Farmers submits that until this section of the proponent's AIS is extensively revised, the AIS should not be adopted. (s2.5)

RECOMMENDATION 7

The economic modelling used in the proponent's AIS is destructively simplistic. The economic modelling needs to allow for variations that occur over long periods of time. The modelling should also allow for the consideration of social and environmental externalities. (s2.6.1)

RECOMMENDATION 8

Water considerations in an agricultural context need to be more extensively considered. This includes risk mitigation strategies for minimising impacts on ground and surface water, and expanding the study of water affected to more than just highly productive groundwater within the project area. (s2.6.2)

RECOMMENDATION 9

All references to Biophysical Strategic Agricultural Land (BSAL) throughout the document should be consistent and state clearly that it refers to the area within the project bounds only.

RECOMMENDATION 10

NSW Famers completely reject the air quality section of the proponent's AIS. It is urgently recommended that this section of the proponent's AIS be rewritten. (s2.6.5)

RECOMMENDATION 11

NSW Farmers submits that a cumulative impact assessment of socio-economic, agricultural land and water resources, and public health and amenity factors should be included in the proponent's AIS and in the proponent's broader Environmental Impact Statement. (s2.6.7)

RECOMMENDATION 12

NSW Farmers submits that there are a number of unreasonable assumptions that have been made in the AIS in relation to labour supply. NSW Farmers questions the inconsistency of data provided by the author and the Minerals Council of Australia. It is recommended that the data provided is comprehensively reviewed. (s2.6.8)

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1. OVERVIEW

NSW Farmers has a long history of involvement in the *Strategic Regional Land Use Policy* (SRLUP), from its inception to the current implementation process. Whilst the Strategic Regional Land Use Plans for the New England North West and Upper Hunter are intended to identify strategic agricultural land and protect valuable water resources, the assessment of the effectiveness of these plans will have a consequence on the broader policy on projects such as the proposed Watermark Coal Project.

NSW Farmers has closely monitored the progress of the Watermark Coal Project since Exploration Licence 7223 was granted by the NSW Government in October 2008. Whilst NSW Farmers does not generally focus on specific mineral, coal or coal seam gas projects, the proximity of the Watermark Coal Project to the iconic food and fibre producing region of the Liverpool Plains, the greenfields nature of the proposed development, and the scale of the project have commanded the Association's attention.

NSW Farmers believe the assessment of the Watermark Coal Project presents the first major test of the effectiveness of the Strategic Regional Land Use Policy; the New England North West Strategic Regional Land Use Plan; the Aquifer Interference Policy; and the new Agricultural Impact Statement requirement.

It should be noted that the delayed release of the NSW Department of Planning and Infrastructure's Cumulative Impact Assessment Methodology and Guidelines has seriously hindered the assessment of the likely impacts of the project from agricultural land and water, socio-economic, public health and amenity perspectives. NSW Farmers argue that the failure of the proponents Agricultural Impact Statement (AIS) to assess or even consider cumulative impacts is a major deficiency requiring urgent attention.

2. Agricultural Impact Statement

2.1 Regulatory Framework

NSW Farmers notes the inclusion of the *Environmental Planning and Assessment Act 1979* (notably, the Director General's Requirements for the project); the New England North West Strategic Regional Land Use Plan; Guideline for Agricultural Impact Statements; and *Water Management Act 2000* in the Regulatory Framework section of the report. Whilst these are key regulatory considerations, it is curious that the *Water Act 2007* and consequent Murray Darling Basin Plan have not been considered in this section. Given that the Murray Darling Basin Plan is aimed at ensuring a balance between the water needs of communities, industries and the environment by setting long-term average sustainable diversion limits (SDLs) for both surface water and groundwater, it is of direct relevance to the project. Moreover, given the plan will regulate the amount of water that can be used for consumptive purposes in the Basin, and that the sustainable diversion limit for the Gunnedah-Oxley Basin is one of the outstanding SDLs under dispute, the Murray Darling Basin Plan should be a key consideration in terms of the regulatory framework for the project.

The recently proposed amendments to the *Environment Protection and Biodiversity Conservation Act 1999* that will require federal assessment and approval of coal seam gas and large coal mining developments which have a significant impact on a water resource are not noted in the AIS. Whilst the AIS was prepared prior to the introduction of this Bill,this significant amendment to Australia's national environment law must also be considered in the context of the project's regulatory framework. NSW Farmers understands that the Federal Environment Minister has written to proponents with projects already undergoing assessment to advise them of additional information requirements. NSW Farmers assumes this will directly affect the Watermark Coal Project.

2.2 Existing Environment

2.2.1 Soils

NSW Farmers has been critical of the paucity of current, credible soils data in NSW, noting that the methodologies for the two primary datasets relied on (at the time of writing) for the mapping of biophysical strategic agricultural land are scientifically dated. NSW Farmers provided detailed, expert advice on the scientific validity of the Office of Environment and Heritage's Draft Inherent General Fertility Mapping of NSW in its submission to the NSW Government in response to the delivery of the Strategic Regional Land Use Policy (May 2012). In that submission, NSW Farmers highlighted the importance of undertaking detailed analysis, including examination of farmer-held datasets, in order to 'ground-truth' soil condition and crop performance. This analysis includes compaction, sodicity, waterlogging, soil water holding capacity, soil acidity, nutrient deficiencies, wind hazard, existing erosion, salinity hazard and enterprise adjustment. Whilst the completion of a soil survey and land capability impact assessment is welcome, the focus on the project area and offset areas seriously limits the scope and application of the study in terms of informing the analysis of impacts across the local area (as per the Director General's Requirements).

2.3 Existing Agricultural Enterprises and Resources and Agricultural Assessment

2.3.1 Scale

As an overarching comment not limited to this section of the document, the failure to adequately consider, review and analyse resources and impacts beyond the bounds of the project boundary seriously diminishes the efficacy of the entire AIS. The Director General's Requirements clearly state that there must be a detailed description and assessment of the potential impacts on agricultural resources and/or enterprises in the local area, as well as a detailed description of the measures that would be implemented to avoid, reduce or mitigate impacts of the development on local agricultural resources and/or enterprises. The relevant agency comments also reflect the need to consider impacts beyond the confines

of the project boundary. For example, the Department of Primary Industries' requirements refer to impacts on surrounding agriculture; loss of water from the irrigation sector; impact on rural labour and rural communities; and the accumulated effect of mining changing the rural nature in the region. Similarly, Gunnedah Shire Council's requirements refer specifically to a full review of agricultural impacts relative to the surrounding rural lands; and refer to potential impacts on livestock and crops on properties in the vicinity of the development. It is clear from these requirements – as well as the Agricultural Impact Statement Guidelines – that considerable analysis of off-site impacts is required. NSW Farmers note that this has not been sufficiently delivered in the AIS, noting the unwavering focus throughout all sections of the document on Shenhua Watermark owned land; the project area; on-site biodiversity offset areas and off-site biodiversity offset areas (for example Section 5, which canvasses an agricultural assessment of the Shenhua Watermark owned land, the Project area, residual onsite biodiversity offset area and offsite biodiversity offset areas only). Whilst some sections of the document do make reference to the surrounding locality (for example Section 4.1.3), this is very much the exception, not the rule, and at a scale too course to provide meaningful analysis.

2.3.2 Data

NSW Farmers note that Sections 4.4 and 4.5 of the AIS refer to Australian Bureau of Statistics data from 2008 and 2007 respectively. NSW Farmers is concerned that these value of agricultural production and employment figures may not represent a realistic 'benchmark' for the region noting that the state was at that time in the grips of a lengthy and unprecedented drought. As an example, in September 2008, 71.6% of the state was in drought[2], with stocking rates and crop production affected accordingly. NSW Farmers understands that the Minerals Council of Australia commissioned KPMG to conduct an analysis of the changing resident demographic profile of Australia's mining communities, with the final results released in February 2013. This report includes a case study on the Upper Hunter, including the Watermark Coal Project area. This report includes employment data from 2006 – 2012, begging the question why more recent data was not included in the AIS.

2.4 Stakeholder Consultation

NSW Farmers is pleased to see stakeholder consultation included in the AIS and cannot over-state the importance of regularly and meaningfully engaging with the community. However, the cursory nature of Section 6 – in particular Section 6.3 – does not reflect the significant challenge that effective stakeholder engagement represents. Whilst recognising that the list of regulators, lessees, neighbouring landowners and industries in Section 6.1 is purported to be a summary, it is of concern that the local Livestock Health and Pest Authority is not included in this list, noting the critically important role that this organisation (currently being transitioned into Local Land Services) plays in terms of

[2] Department of Primary Industries (2008) *Drought map and status of RLPBs: September 2008* http://www.dpi.nsw.gov.au/agriculture/emergency/drought/situation/drought-maps/drought-maps/drt-area-2008-09

biosecurity, animal health, weeds and pest animals. Similarly, it is of enormous concern that Namoi Water is not included in this list, noting its status as the peak industry group for irrigated agriculture across the region, as well as the peak water entitlement holder group in the Peel, Upper Namoi and Lower Namoi Valleys.

NSW Farmers notes the list of regulatory stakeholder issues provided in Table 32, in particular the absence of bushfire risks. With the Rural Fire Service declaring the 2012/13 bush fire season "the most challenging bush fire season in around a decade"[3], it is imperative that bush fire risk mitigation strategies are developed for the project area and surrounds, including scheduled hazard reduction activities, fire trail maintenance and so on.

Similarly, whilst weed and feral animal impacts are listed as a regulatory stakeholder issue, there is no reference to biosecurity, let alone the development of the NSW Biosecurity Strategy[4]; a strategy based on the principle of shared responsibility for protecting the economy, environment and community from negative impacts associated with pests, weeds and diseases. Intensive livestock operations such as the the Baiada Poultry breeder sheds north of the project area and Caroona Feedlot south of the project boundary have unique biosecurity requirements that do not appear to have been considered as part of AIS.

2.5 Risk Assessment

Whilst noting that additional information is provided in Appendix 6, the staggeringly inconsequential weighting given to the actual risk assessment –comprising one paragraph of discussion and a seemingly throwaway line that "risks will be reduced, where reasonable and feasible, or controlled through the implementation of appropriate mitigation and management measures" (p.72) is strikingly inadequate. . .

Table 34 notes that (without mitigation measures), there are 'significant' risks to the availability and productivity of agricultural land; 'medium to significant risks to surface and ground water; and 'medium' risks to rehabilitation, on top of a number of low risks to a number of issues including (but not limited to) air quality, labour and traffic and transport. Despite this, the community is being asked to take on faith that these risks will be reduced or controlled, without detailed description of how and when this will happen. Further no information is given on how risk mitigation will be monitored, evaluated and reported. ***NSW Farmers submits that until this section of the AIS is extensively revised, the AIS will not be adopted.***

2.6 Impact Assessment

2.6.1 Availability and Productivity of Agricultural Land

[3] Rural Fire Service (3 April 2013) *End to one of the worst fire seasons in recent times* http://www.rfs.nsw.gov.au/dsp_more_info_latest.cfm?CON_ID=20325
[4] NSW Department of Primary Industries (2012) *Draft NSW Biosecurity Strategy* http://www.dpi.nsw.gov.au/biosecurity/biosecurity-strategy

The failure of this section of the document to consider resources and operations beyond the confines of the disturbance area, onsite and offsite biodiversity offset areas and water resources seriously limits its efficacy.

NSW Farmers questions why only a minimum of 1000ha of the 5 630ha of agricultural land situated within the disturbance area is intended to be re-established within the rehabilitated disturbance area. If rehabilitation is successful, the entire area should be able to be returned to agriculture – which Table 42 (p.89) supports, noting the comparison of the pre-mining and post-mining rural land capability classifications of the disturbance boundary suggest that 100% of the land will be suitable for agriculture post-mining. Whilst recognising and wholeheartedly supporting the importance of re-establishing native woodland and grassland lost as a result of the project, this should not be in areas previously set aside for agriculture. NSW Farmers support the concept of 'not net loss' of agricultural land, and committing to make available only 20% of formerly agricultural land for agricultural purposes is not consistent with this concept.

In addition, NSW Farmers has concerns around some of the economic modelling provided in order to assess the impact on the availability and productivity of agricultural land. In the first instance, it seems overly simplistic to base an assessment on net present values and production costs over the next 30 yearson a cost benefit analysis alone. This approach does not allow for variations that may occur over this lengthy period of time. This approach also does not allow for the consideration of social and environmental externalities.

There arebroad assumptions contained in Appendix 7, on the projected return for those commodities identified. Estimating a gross and net value of production based on current prices and demands for the next 30 years without providing any sensitivity analysis based on forward projections isa seriously deficient analysis. For example the real value of agrifood demand is expected to be 77% higher in 2050 than in 2007.[5] Recently released ABARES forecasting predicts that average prices of agrifood products will increase by 11.5% by 2050 from 2007.[6]

2.6.2 Groundwater and Surface Water

As an overarching comment, it is astonishing to note that the primary mechanism purported to mitigate risks to groundwater and surface water is suggested to be the purchase of water licences:

> *"The losses to agriculture from the reallocation of water from agricultural purposes to coal mining purposes will be mitigated by obtaining appropriate water licences" (p.83)*

[5] ABARES, *Food demand to 2050 – Opportunities for Australian Agriculture* (A Paper presented at the 42nd annual ABARES Outlook Conference (March 2012) http://adl.brs.gov.au/data/warehouse/Outlook2012/fdi50d9abat001201203/Outlook2012FoodDemand2050.pdf

[6] Ibid.

This suggestion is indicative of a very poor understanding of the regulatory and community stakeholder issues, which include for example, impacts on surface water flow- pressure, recharge and quality, impacts on existing users, impacts on ground water flow- pressure, recharge and quality, extraction of water from the Mooki River, discharges into watercourses, impacts on groundwater aquifers, buffer distances to groundwater productivity, flooding impacts, water licensing requirements and strategy, and integration of Namoi Water Study findings. This is to be on top of the relevant agency comments listed in Table 2, which include impact on surrounding agriculture from the disturbance to surface and groundwater flow, pressure, recharge and quality; the importance of groundwater for livestock; loss of water from the irrigation sector; and the long-term implications of moving water from the irrigation sector to the mining sector.

Section 8.2.2 of the document outlines that groundwater levels are predicted to reduce by up to 3m in the Permian underlying the Narrabri Formation. It also highlights that the more extensive depressurisation induced by mining in the Southern Mining Area will extend to a maximum of 3.2km from the mining area in year 25 – again highlighting the need to consider off-site impacts and down-stream users. The model referred to in this section predicts a drawdown of up to 25m in the Permian underlying the Narrabri Formation. NSW Farmers assert that this is a particularly significant drawdown, requiring extensive risk mitigation strategies, and thorough analysis of the implications for surrounding resources and operations.

Section 8.2.2 also acknowledges that there will in fact be changes in groundwater levels in the alluvial aquifers, despite the proposed open cut mining areas not directly intersecting the alluvial aquifers of the Narrabri and Gunnedah Formation. NSW Farmers notes that this is of enormous significance to both farming operations and the wider community. These changes warrant extensive risk mitigation strategies, and thorough analysis of the implications for surrounding resources and operations.

NSW Farmers is not convinced that the implications for farming operations along the Mooki River have been extensively or comprehensively considered. The Mooki has been the subject of a Floodplain Management Plan since June 2006[7] and is not unaccustomed to high rainfall events, the most recent of which was in January 2013, resulting in moderate to major flooding of the Mooki River at Breeza, and associated pump and livestock warnings. Whilst Section 8.2.4 suggests a “small increase” in the net flow from the Mooki, it does not acknowledge the risks associated with runoff water releases. The Hansen Bailey Surface Water Impact Assessment[8] states that mine runoff water may be released “during a rainfall event that exceeds the design capacity of the sediment control system” (p.41). If recent flooding events are indicative of forthcoming seasons,

[7] NSW Government (2006) *Caroona-Breeza Floodplain Management Plan* http://www.environment.nsw.gov.au/resources/floodplains/CaroonaBreezaFMP.pdf

[8] Hansen Bailey (2013) *Watermark Coal Project Environmental Impact Statement Surface Water Impact Assessment* http://www.hansenbailey.com.au/assets/pdfs/watermark/Watermark_Coal_Project_EIS_Appendix_S-Surface_Water_Impact_Assessment.pdf

NSW Farmers submits that the AIS must consider the flooding risks to surrounding private property, and the consequential risks to those agricultural operations.

Section 8.2.4 notes that:

> *"By approximately Year 60, the zone of depressurisation has fully retracted and there is no further cumulative transfer from the Mooki River to the underlying aquifer" (p.82)*

NSW Farmers finds it curious that whilst the majority of the AIS focuses on analysis conducted over a 30-year timeframe, there are risks associated for at least two-fold. . It begs the question of whether analysis such as the cost benefit analysis should be conducted over a 60-year timeframe rather than the current 30-year timeframe.

NSW Farmers is concerned that the discussion of whether the Gunnedah Formation is considered to satisfy the 'highly productive groundwater' criteria for yield and salinity concludes that whilst it does in fact satisfy these criteria, it "does not occur within the Project Boundary". Aside from Section 8.2.2 stating clearly that there will in fact be changes in groundwater levels in the alluvial aquifers, this discussion again limits analysis to the project boundary, rather than at a broader scale. NSW Farmers argue that considering only whether highly productive groundwater occurs directly beneath biophysical strategic agricultural land impacted by the project or elsewhere *within* the project boundary does not adequately address the Director General's Requirements and relevant agency requirements.

As a result, it is difficult to understand how the water management plan referenced in Section 9.3.7 (p.109) can "minimise offsite water quality impacts and describe the water management protocols of the site and any required response procedures of remedial actions". The community is essentially being asked to take on faith the proposed management measures and monitoring plans regarding water management, firstly because potential off-site impacts have not adequately been identified, and secondly because there is no detail on *how* these impacts will be avoided, minimised, managed and/or monitored.

2.6.3 Soils and Land Capability

As raised repeatedly throughout this submission, limiting the analysis of potential impacts to soil resources and land capability *within* the project boundary means that there is no discussion of the potential off-site impacts associated with, for example, subsidence. Cursory statements such as "no impact to surrounding Alluvial Black Soils (or the blacksoil plains) is anticipated due to the Project" (Section 8.5.1, p.88) are neither substantiated, nor reflective of the analysis being within-project-area only. Similarly, there is no substantiation or explanation of the assertion that "Impacts to the land as a result of the Project will remain within the Disturbance Boundary" (Section 8.5.3, p.88)

2.6.4 Biophysical Strategic Agricultural Land

Again, by limiting analysis of biophysical strategic agricultural land (BSAL) to the disturbance and project areas only, NSW Farmers questions whether the Director General's and relevant agency requirements have been met.

NSW Farmers is concerned by the apparent inconsistency in reporting of BSAL throughout the document. Whilst some sections refer to "a small area of BSAL (96.1ha)… within the Project area" (Section 8.2.7, p.83), it is clear in Section 8.5.5 (p.90) that an additional 696ha of BSAL is present in the onsite offset areas. Given that Section 8.6 (p.92) suggests that this additional area will be lost to agriculture forever as they are set aside as ecological offsets in perpetuity.There is clearly a substantial impact on BSAL, particularly in terms of its availability. This is not reflected in Section 8.6.2 (p.95), which states that "the Project will impact on 96.1ha of BSAL". Clearly, locking up almost 700ha of BSAL in perpetuity as ecological offsets "by excluding agricultural activities and actively regenerating the land to native woodland and grassland" (p.96) will dramatically affect agricultural productivity by a significant change in land use. Section 8.6.6 surmises that the project "will impact and significantly reduce the agricultural productivity of 96.1 ha of BSAL by open cut mining disturbance" (p.97). NSW Farmers suggests this is deliberately misleading, as it ignores the almost 700ha of BSAL that is intended to be permanently alienated from agriculture. The executive summary also refers to only 96.1ha of BSAL being affected, which is enormously misleading given the area of BSAL associated directly with the project – not including surrounding areas – is at least 792ha.

NSW Farmers submits that all references to BSAL throughout the document should be consistent and state clearly that it refers to the area within the project bounds only.

2.6.5 Air Quality

NSW Farmers has reviewed the Kannegieter report[9] referenced in Section 8.7.1 of the proponent's AIS and argues strongly that the findings of this report are not accurately reflected in the proponent's AIS.

As an initial comment, the report is incorrectly referenced, with the University of Sydney's post-code incorrectly listed as the date of writing. NSW Farmers has confirmed with the author that the report was actually written some 11 years earlier. Such a gross oversight does not give NSW Farmers confidence that robust analysis of the Kannegieter report has occurred before referencing it in the proponent's AIS..

Whilst the proponent's AIS correctly identifies (via a direct quote – though not identified as such) Kannegieter's comment that "Most reports would indicate that feed, bedding, manure or urine contamination of dust is responsible for the

[9] Kannegieter, N.J. (1995) *Report Examining the Impact of Increased Dust Deposition on Grazing Animals re: Mt Pleasant Project*

majority of respiratory problems seen in production and racing animals"[10], it does not acknowledge the massive disclaimer that Kannegieter placed on this statement when he noted in the very first sentence of his report that "The possible effects of an increase in dust deposition levels…on grazing stock have not been adequately documented or investigated" (p.2)…with "little data in the scientific literature" (p.2) on this issue.

The selective quoting of the Kannegieter report in the proponent's AIS ignores key recommendations made in the report of direct relevance to the proposed Watermark Coal Project, including that "it may be reasonable to adopt similar guidelines for horses and cattle in regard to respirable dust as have been utilised in humans" (p.5); and that "The effects of ingestion of excessive amounts of dust in relation to pasture contamination should also be considered" (p.8).

Given the selective quoting of the only referenced source material on the impacts of dust impacts on grazing animals; the incorrect reporting of the age of the report (prepared almost 20 years ago); and the failure to acknowledge key recommendations regarding the impacts of dust on grazing animals; NSW Farmers must reject this section of the proponent's AIS and request that it be urgently rewritten.

On a related matter, NSW Farmers is surprised by the absence of analysis of the potential impact of vibration on livestock in areas surrounding the project, particularly in terms of stress levels and stock handling.

2.6.6 Visual

NSW Farmers is concerned that the proponent's AIS suggests that scenic and landscape diversity is only a "key resource base for tourism and associated agricultural pursuits such as viticulture and throroughbred horse breeding" (p.100). Whilst not diminishing the importance of scenic and landscape diversity to these sectors, NSW Farmers cannot understand how the proponent has determined that "No sensitive receptors will experience significant visual impacts as a resut of the Project" (p.100), particularly noting that the same section of the document indicates that the final landform will not be integrated with the existing landscape until Year 30.

2.6.7 Cumulative Impacts

As a final – but no less significant – comment in response to Section 8 of the document, NSW Farmers is concerned that there appears to have been no consideration of cumulative impacts within the proponent's AIS. Whilst the delayed release of the Department of Planning and Infrastructure's Cumulative Impact Assessment Methodology and Guidelines would obviously assist in the assessment of cumulative impacts from a socio-economic, agricultural land and water resources; and public health and amenity perspective; the absence of these

[10] Kannegieter, N.J. (1995) *Report Examining the Impact of Increased Dust Deposition on Grazing Animals re: Mt Pleasant Project*, p. 2

guidelines does not excuse the apparent absence of cumulative impact assessment throughout the document.

NSW Farmers submits that cumulative impact assessment of socio-economic, agricultural land and water resources; and public health and amenity factors should be included in the proponent's Agricultural Impact Statement and broader Environmental Impact Statement.

2.6.8 Labour Supply

NSW Farmers notes that the more substantive analysis of impacts on labour supply has taken place via the Social Impact Assessment associated with the project. However, it is concerning that the discussion on this issue (in Section 8.11, p.101) does not appear to consider wage pressure. NSW Farmers is also concerned that the reported rates of unemployment in Section 8.11 (p.101), which suggest that rates of unemployment are higher within the Gunnedah, Liverpool Plains and Tamworth Regional Local Government Areas than neighbouring LGAs and NSW (reported in the document as 5.2%), contrast starkly with the Minerals Council of Australia's own demographics study[11] released in February 2013, which indicates that the rate of unemployment in the Hunter Valley (which in this study extends up to Gunnedah) "has fallen significantly between June 2006 to June 2012 from 8.4% to 3.6% respectively" (p.67). The report goes on to say that "the Hunter Valley's level of unemployment fell and has remained below the regional and national average since then [the breaking of the drought in 2008]" (p.67).

NSW Farmers submits that there are clearly a number of assumptions that have been made in this section of the document and questions the inconsistency of data provided by the author and the Minerals Council of Australia.

2.7 Mitigation and Management Measures

NSW Farmers has not been able to fully analyse Section 9 of the document owing to the issues raised above in previous sections of the proponent's AIS, not the least of which is the failure to fully consider impacts beyond the bounds of the project area. As raised above, broad sweeping statements about how, for example, a water management plan will "minimise offsite water quality impacts" (p.109) are unsubstantiated and lacking in detail. NSW Farmers would be please to have an opportunity to review a revised version of the section of mitigation and management measures after the deficiencies raised throughout this submission are satisfactorily addressed and reflected in a substantially revised AIS.

[11] KPMG (2013) *Minerals Council of Australia Analysis of the Changing Resident Demographic Profile of Australia's Mining Communities* http://www.minerals.org.au/file_upload/files/reports/MCA-13-ResidentialProfile0131-MYR.pdf