From: digital.services=squiz.dpie.nsw.gov.au@squiz.regional.nsw.gov.au on behalf of digital.services@squiz.dpie.nsw.gov.au
To: DPIE W Regional Water Strategies Mailbox
Subject: Your submission for Namoi Regional Water Strategy
Date: [redacted]
Attachments: number 10.docx

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1. Information on confidentiality and privacy

I give my permission for my submission to be publicly available on the NSW Department of Planning, Industry and Environment website.:	Yes
I would like my personal details to be kept confidential.:	Yes

2. Your details

Email address:	[redacted]
Name:	
Address:	
Contact phone number:	[redacted]
Do you identify as an Aboriginal person?:	No
Are you an individual or representing an organisation?:	Individual

3. Organisation or business details

Who do you represent?:	Other
If you selected	

Government, please clarify.:	
If you selected Peak representative organisation, please clarify.:	

4. Draft Regional Water Strategy objectives and vision

Do you support this vision for the Namoi Regional Water Strategy? :	No
If no, please outline your vision for the long term management of water resources in this region?:	The Namoi Valley is supported by a diverse range of surface and groundwater resources. Each of these different sources contribute to meeting a range of needs across our community including critical human needs, economic activities and environmental requirements. Water is managed through the use of Water Sharing Plans using water models over long term to asses rule options and access to ensure compliance with relevant state and federal limits. The rules in the initial plans were developed through an inclusive and iterative process of engagement with the community. These plans are recognised as not being designed to cope with extreme water shortages. The development of water infrastructure in the Namoi Valley largely occurred under different policy settings The development of the regional water plan was done entirely without input from the community and the draft plan is presented with little detailed evidence regarding why options were considered and how the plan will prioritise water needs in extreme events, and the trade-offs required. The principle of balancing water sharing across all three elements of social, economic and environment is in line with the Water Management act 2000, however there is no context in how this is achieved in variable climate situations in this plan. Developing a “rule set” to cater for extreme events is impossible hence the focus on long term plans and drought management planning. The concept of augmenting resources to ensure the base needs of the community and environment are met in these circumstances is supported, however the cost benefit and value of these solutions has not yet been presented. It is difficult to have a strategy that does not have a clear decision-making matrix. The Regional Water strategy appears to have focussed its engagement on local government, whilst some meetings were held in regional towns these were poorly attended. That an option needs to address any one of the objectives can lead to adverse impacts on other sectors. How the options are considered in a matrix of decision making is not clear in the strategy. The vision itself is simple and generally sufficient, but lacks context and outcomes sought to evaluation of these in drought situations.

5. Information and modelling used to develop the Namoi Regional Water Strategy

“The Namoi River plays a crucial role in providing water for critical human

Do you have any comments about the information used to develop this strategy?:	and environmental needs downstream, contributing on average 24% of the flows into the Barwon-Darling River." This statement lacks context, the Namoi contributes a significant volume of water in flood and high flow. It's connectivity in low and medium flows is limited given the length of the system. Practical experience demonstrates the limits to being able to "recreate" or even "augment" flows to achieve connectivity when the system is naturally not connected. Page 13 "More than one quarter of all surface water used in the Lower and Upper Namoi comes from water diverted from floodplains and intercepted before it enters rivers and creeks." Please provide the source of this statement given the model data has not been provided to the community to review, nor has the FPH Namoi model been peer reviewed. Page 14. "Environmental water releases on top of high-flow events can help to deliver water to important environmental assets along the river and contribute to end of system flows." The volume of environmental water has significant limits on what can be achieved at end of system, any achievement of flow outcomes can only occur if done in conjunction with other users. It is impractical to make this statement as the volume held cannot contribute to end of system flows or create end of system flows. This statement should be removed. "While some industries can adapt to annual and seasonal variations in water availability, most regional towns do not have the same ability to adjust." Again this statement is misleading, the towns of the Namoi, Gunnedah, Boggabri, Narrabri and Walgett all have access to Groundwater they have a significant advantage in the diversity of water resources available to them. The largest issue is the groundwater quality at Walgett which can be resolved with proper treatment processes or off river storage downstream. The river does not under natural conditions supply water to the end of the system during these periods. Water NSW in the lead up to managing the last remaining allocations committed to undertaking a survey of all stock and domestic users downstream of Wee Waa to determine their water needs. Namoi Water has done this work and understands the number of impacted residents is small and the government funding to provide alternative drought supplies provided opportunity to adjust to limited water availability. It is forgotten that in times past there was no adjustment when the river was dry, those pastoralists along the river destocked and left their properties when there was no water. Today we have the ability to access groundwater and cart water as necessary. Quantifying the number of households affected and assessing their capacity to access alternative supplies is an important component of drought preparedness for the next dry period. In terms of surface water impacts the Town of Tamworth with the augmented Chaffey and Dungowan dam managed th
Please provide details if there is additional information you think we should consider?:	There is limited data from these studies. The use of this data until costed and properly assessed is again misleading.

6. Stochastic modelling method

"Environmental water licences are used to supplement environmental water set

Do you have any comments about the modelling method used to develop this strategy?:	aside by the rules in the water sharing plans." Please clarify which "environmental water" the RWS is referring to? There is only the minimum daily flow rules in July that is "environmental water" and to date the CEWH have rarely used their water to augment this flow. It has largely been about maintaining habitat in the upper reaches or adding onto the September irrigation flow to create greater flow and refugia during 2018 season. "Many of the rivers throughout the Namoi region and associated Barwon-Darling system already experience periods of no flow;" add under natural conditions. Page 90 It would have been better in the plan to provide how the CEWH have used their water to compare entitlement to allocation, to use. Perhaps this can be added in the final draft as this is important context so as to understand the role this water can plan in environmental outcomes. First flush – "Rivers and waterways were reconnected. • By the end of June more than 583 GL of inflows reached Menindee Lakes, which enabled the Lower Darling River to restart flows" Lets reflect and in the interest of transparency, note that the original target for critical human need was 165gl. Further that the flow forecast was out by some 180gl during the event and failed to take into account Qld inflows. The Namoi Water excel spreadsheet provided greater accuracy of flow forecast that those from official channels, why? Because of regional knowledge, because of an understanding of how water moves in and around different systems, the management of extreme events is hampered when managed from Sydney without sufficient engagement and listening to the advice given on the ground. Further to correct the record on farm storages increased because of rainfall, the embargo on FPH was poorly managed, create distress and whilst the protocols may now be in place to improve this process in another 10 years when it occurs again those same staff will have moved on. However the farmers will still be here, with the knowledge. Page 103 Please advise where the 150gl of high security unregulated water is situated. Page 104 again where is the context? Of the 1% held by the Mines how much water have they accessed annually over the life of the water sharing plan? What percentage was this water of the overall water for that year used? Namoi Water has a graph that demonstrates that this source of water is a high percentage of take during low water years and the delivery cost through the constriction at the gap is high, the conveyance has 100% losses in a dry system. This report lacks sufficient detail and understanding of the nuances of water management during drought and the lack of engagement with water users is a cause for concern in terms of the options developed. Groundwater Page 108 "This is more than twice the number of entitlements as the neighbouring Macquarie-Castlereagh alluvial system." Why would the RWS c
Is there any additional information that you believe could help us assess the benefits and disadvantages of draft options?:	Serious consultation with all stakeholders prior to this report being finalised to address the comments raised in this submission.

7. Opportunities and challenges for water management in the Namoi region

Do you have any comments on the opportunities, risks and challenges identified?:	Connectivity is not defined, how can you have as a significant option to improve connectivity when the context of connectivity has not been provided? How can the Namoi contribute to improved connectivity in periods of low flow when our system is already improved in terms of low flows in catchment outside natural periods? “While considering a range of options to maintain and improve the resilience of the region’s water resources, we have also included options that take the next step in identifying innovative solutions that will add value to existing industries, support emerging industries and generate greater benefits that extend across the community.” The strategy clearly states the focus of the engagement was with councils, how then can the objective above be met when the diverse range of stakeholders have had one brief presentation and limited detailed information on the modelling presented. The aims of this strategy come at a cost, where increased connectivity is sought the report appears to take steps to identify the impracticality of supply water through to the end of the system in extreme drought but not in real terms of impact. Thus the solutions around off river storage have not even been contemplated, nor has the historical barriers to increasing river storage for these communities. The report fails to consider cost benefit, the Namoi irrigators already have the highest price water in the Murray Darling Basin, we cannot and do not support additional weirs, they are financially unfeasible for the irrigation community. They provide no real benefit in terms of supply and they require fish passage that is already gold plated. Option 22 has no detail in terms of how it is relevant to the Namoi System, surely given the report on fish deaths which is primarily a function of MDBA management of the lakes, the lack of fish passage for fish trapped in the weir 32 pool and an environmental circumstance (inversion) that lead to fish deaths in the worst drought on record for many communities. It is beyond belief that this option could wholly recommend a report that has not been fully costed or assessed as to the practicality of the solutions proposed.
Are there any additional opportunities, risks and challenges that we should consider and what options could address these?:	Too many given lack at context in this report.

8. Draft Namoi Regional Water Strategy options

Which five (5) options do you think are most important?:	
Please comment on	

why you think these options are most important? :	Support Option (5) Support Option (6) Support Option (18) Support Option (30) Support option (31)
Which five (5) options do you think are least important? (If any):	
Please comment on why you think these options are least important? :	Off stream storage should be considered for Walgett not a weir. Carp virus should be considered (interesting that invasive pest management not included in the strategy?) Support Option (18) + insurance scheme for fencing (most landholders will not participate because once installed the fences are often flood impacted). There could be an appropriate scheme to ensure the replacement of the fencing material with the farmer providing labour as a solution.
Do you have any comments on the draft options?:	Option 23 Option 25 Option 29 Option 32 Option 38 Option 41 Option 44 Option 23 – There is limited capacity in this report to consider review of WSP rules, this report is written without context or the level of detail required. This is a general statement made without supporting evidence as to the impact of the changes, the consequences to towns like wee waa Narrabri etc. Option 25 – This has serious and significant impacts and has been removed from the Water Resource Plans in all major inland river plans. It is concerning it has been included in this report as a genuine option when it changes the legal rights of supplementary access in the Namoi. There are better ways to achieve environmental outcomes, that don't involve changing water rights. Option 29 – refer to comments the GDE are not validated via groundtruthed data and the department stated clearly these maps can only be used recognising that they are possible GDE not proven. Option 32 – Bluehole where is the data for this project? Who funds it and what volume of water is anticipated to come as a result of it. Irrigators will not support augmentation projects because we already pay the highest water charges in NSW MDB. We do not want Mollee weir to be raised we can't afford it, we do not support re-reg north of Boggabri as it is in an area of heavy groundwater loss and would only be used to supporting mining it has no relevance to the downstream town requirements it is too far from Walgett and Narrabri uses groundwater. Option 38 - will create untold issues who even raised this? Option 41- Narrabri's recreation spaces did not suffer in the drought as there was sufficient groundwater and the council sold their General Security licence annually for significant profit and put the money into reducing losses through the sewerage system in the town. The proposal for a weir on Narrabri creek was demonstrated to have created massive issue this year when the creek flowed backwards from doctors creek all the way to the RSL club, a weir would have meant Macdonalds KHH nursery and the crossing theatre may all have gone under water. Option 44 - we already have transparency, we have a good hydro who has helped keep water users informed and the new data available on line provides sufficient information for any interest party to view. E. Do you have any other comments on the draft options? The draft list is inadequate even as a first cut of options,

Namoi Water suggests that a meeting should be held to discuss how these options were developed and the lack of context provided in how the community needs to respond. Is this a case of highest numbers win? If that's the case we will ensure every farmer submits individually or is it that Namoi Water represents 800 farmers that our submission will be weighted accordingly?

9. Option combinations

Do you have any thoughts on how the options could be combined with other options?:

This is an irrelevant question given the lack of context in the report. Option 23 – There is limited capacity in this report to consider review of WSP rules, this report is written without context or the level of detail required. This is a general statement made without supporting evidence as to the impact of the changes, the consequences to towns like wee waa Narrabri etc. Option 25 – This has serious and significant impacts and has been removed from the Water Resource Plans in all major inland river plans. It is concerning it has been included in this report as a genuine option when it changes the legal rights of supplementary access in the Namoi. There are better ways to achieve environmental outcomes, that don't involve changing water rights. Option 29 – refer to comments the GDE are not validated via groundtruthed data and the department stated clearly these maps can only be used recognising that they are possible GDE not proven. Option 32 – Bluehole where is the data for this project? Who funds it and what volume of water is anticipated to come as a result of it. Irrigators will not support augmentation projects because we already pay the highest water charges in NSW MDB. We do not want Mollee weir to be raised we can't afford it, we do not support re-reg north of Boggabri as it is in an area of heavy groundwater loss and would only be used to supporting mining it has no relevance to the downstream town requirements it is too far from Walgett and Narrabri uses groundwater. Option 38 - will create untold issues who even raised this? Option 41- Narrabri's recreation spaces did not suffer in the drought as there was sufficient groundwater and the council sold their General Security licence annually for significant profit and put the money into reducing losses through the sewerage system in the town. The proposal for a weir on Narrabri creek was demonstrated to have created massive issue this year when the creek flowed backwards from doctors creek all the way to the RSL club, a weir would have meant Macdonalds KHH nursery and the crossing theatre may all have gone under water. Option 44 - we already have transparency, we have a good hydro who has helped keep water users informed and the new data available on line provides sufficient information for any interest party to view.

Are there additional options that we should consider?:

This is an irrelevant question given the lack of context in the report.

10. Other comments

Comments on Options - diversification of water supplies (solution Dungowan) Namoi Water does not have a view on the dam upgrade expect to state that there is no clarity regarding where the "extra" water is coming from? There remain significant barriers to this project and they should be assessed carefully. - Namoi Water members do not support any proposal to merge the

Do you have any other comments about the Namoi Regional Water Strategy?:	water storage infrastructure of the Namoi and the Peel. Several past submissions have been made on this matter and to quote one Peel farmer “why would you give the Namoi a broken leg too? We already have one there is no sense in crippling two valleys”. This relates not only to pricing but also market issues and the real risk of water shift. The problems of the Peel are clearly created by IPART keeping the fixed charge low and increasing the number of sleeper licences to the point that there are such a small number of Peel farmers actually farming primarily due to the cost of water and poor returns for the industries available in the climate/environment unless they are of intensive or industrial nature. - protecting natural systems such as improving river connectivity, please provide how you intend to do this without having an impact on the existing water licence reliability? The removal of fish barriers is laughable, Namoi farmers committed to three weirs when Keepit was upgraded (Mollee, Gunidgeria and Weeta Weirs) for an estimated cost of $10 million for the fish offset. Given Fisheries and Water NSW have spent the last 8 years debating the quantum of fish passage the price of Mollee blew out to $10 million and we still have no evidence that the fish are passing through because there is no baseline data. Further Gunidgera has been delayed over the last three pricing determinations and now is under a new cost sharing of 80% being funded by the farmer instead of 50/50 as per the agreement when the fish offset was approved. This does not meet with your principle of affordable cost structure. How government can grossly inflate the cost of infrastructure to such an extent by bureaucratic delay is beyond an episode of utopia and these issues should be clearly noted in this report. Context The millennium drought was not the drought of record for the Namoi. Where have the community insights come as per the snapshot comments on page 23? Which community and government agency collated these responses? The aim to bring together updated information to plan for medium to long term water needs is supported however as above how this was done is not clear given the lack of engagement with water users as a key stakeholder. The NSW Government agreed in the Water Management act 2000 to a triple bottom line approach. It is unfortunate that steps 1, 2 and 3 were done without consultation with regional communities. It is a consistent criticism across NSW that these plans have been done in silo engagement without transparency in the early formative stages.

11. Referral

How did you hear about the public exhibition of this strategy?:	Communication from peak body

12. Additional information

Upload supporting documents:	number 10.docx, type application/vnd.openxmlformats-officedocument.wordprocessingml.document, 20.5 KB

Comments on Options

- diversification of water supplies (solution Dungowan) Namoi Water does not have a view on the dam upgrade expect to state that there is no clarity regarding where the "extra" water is coming from? There remain significant barriers to this project and they should be assessed carefully.
- Namoi Water members do not support any proposal to merge the water storage infrastructure of the Namoi and the Peel. Several past submissions have been made on this matter and to quote one Peel farmer "why would you give the Namoi a broken leg too? We already have one there is no sense in crippling two valleys". This relates not only to pricing but also market issues and the real risk of water shift. The problems of the Peel are clearly created by IPART keeping the fixed charge low and increasing the number of sleeper licences to the point that there are such a small number of Peel farmers actually farming primarily due to the cost of water and poor returns for the industries available in the climate/environment unless they are of intensive or industrial nature.
- protecting natural systems such as improving river connectivity, please provide how you intend to do this without having an impact on the existing water licence reliability? The removal of fish barriers is laughable, Namoi farmers committed to three weirs when Keepit was upgraded (Mollee, Gunidgeria and Weeta Weirs) for an estimated cost of $10 million for the fish offset. Given Fisheries and Water NSW have spent the last **8 years** debating the quantum of fish passage the price of Mollee blew out to $10 million and we still have no evidence that the fish are passing through because there is no baseline data. Further Gunidgera has been delayed over the last three pricing determinations and now is under a new cost sharing of 80% being funded by the farmer instead of 50/50 as per the agreement when the fish offset was approved. This does not meet with your principle of affordable cost structure. How government can grossly inflate the cost of infrastructure to such an extent by bureaucratic delay is beyond an episode of utopia and these issues should be clearly noted in this report.

Context

The millennium drought was not the drought of record for the Namoi. Where have the community insights come as per the snapshot comments on page 23? Which community and government agency collated these responses?

The aim to bring together updated information to plan for medium to long term water needs is supported however as above how this was done is not clear given the lack of engagement with water users as a key stakeholder.

The NSW Government agreed in the Water Management act 2000 to a triple bottom line approach.

It is unfortunate that steps 1, 2 and 3 were done without consultation with regional communities. It is a consistent criticism across NSW that these plans have been done in silo engagement without transparency in the early formative stages.

1.3.2 Existing studies

The 20 year infrastructure plan was not costed, it is a cobbled wish list of options that were presented and not discussed nor adjusted after feedback from stakeholders.

The Long term environmental water strategy is a commonwealth document that is to inform how environmental water should best be used. It has significant gaps in the assessment of risk and this was highlighted in the feedback to the Namoi Water Resource plan. Attached to this document is our submission on that plan and we

STRONGLY reject the use of this document in any context other than as information about how water “might” be used in different climate scenarios.
“We have continued to talk with councils and water utilities about their thoughts on what the Namoi Regional Water Strategy could cover.” As per the above it appears the lack of engagement with all stakeholders has limited the scope of the strategy as being primarily about town water supply. If this is the engagement model and outcome then the strategy should be adjusted to reflect the actual approach taken. To make statements about connectivity, water models and water sharing plans there should have been significant engagement with a broader range of affected stakeholders. Covid is no excuse for non engagement with other stakeholders.

Page 32 supports the view that this document is focussed on town water supply, perhaps it can be reframed on this basis as it is clear there is limited effort on the other components of water management within the region.
Responding to drought, of the $4 billion how much has been spent in the Namoi? How much has actually been spent and what outcomes were delivered in terms of physical infrastructure and changes to water security? What is the change in NSW Water security as a result of this funding?
Opportunities and Challenges
“If we do nothing, towns that rely primarily on surface water could face more extreme water security risks under the worst-case climate change scenarios”. Given the ground water resources of the Namoi provide for a significant risk management tool against this issue where has this been included in the modelling of water availability, community requirement and assessment against shocks and changes? Please provide a response to this question.
“The Namoi region provides water for critical human and environmental needs downstream—contributing, on average, 24% of the inflows into the Barwon-Darling River” This statement is false in the context of drought and extreme low supplies. The Namoi is not connected consistently to the end of system nor is the Barwon Darling. This is not just a function of upstream demand it is a function of water availability and rainfall.
“Securing intra-valley connectivity from the Peel and Manilla Rivers into the Namoi River will be critical to securing end of system flows to the Barwon-Darling River” Again this statement appears to have been made without looking at the data, 95% of the Peel flows into the Namoi. In a drought sequence the river drys up and does not connect unless it is released water.
“The overall ecosystem health of the Namoi region (including the Peel River) is poor and the region’s fish community is in very poor health.” Again this is a broad brush statement, the health of the Namoi and Peel in hydrology is good, the impacts on fish are largely to do with introduced invasive species, over fishing, poor riparian management and fish passage (as well has barriers to restocking).

“There is potential for increased likelihood of mass deaths.” There has been a long history of fish deaths across all river systems in extreme drought, this is not new. When you trap fish in small area and you have an inversion of climate removing oxygen this results if fish deaths. This was a function of mulitple issues, not just the drought.
We have an already altered system, rail and roads impact on how water moves

across the landscape farming practices in particular landscape management affects water movement. We have regionally developed towns because of storages and water security. The statement that we could further regulate the river or natural flow regime is not necessarily going to result in negative impacts.
Evidence has been used to determine resilience targets as per our catchment action plan, these are a far better method to assess changes to the catchment system.
Namoi Water strongly recommends the Regional Water Strategy use the risk resilience products developed by the Namoi CMA as a starting base for assessing the challenges and impacts on the region.
The opportunity to explore ways to mitigate risks and improve fish passage should be looked at as to why and who pays.
"We need to better manage groundwater resources."
This statement is insulting, the Namoi Farmers voluntarily gave up water long before the department recognised the issue of declining water levels. They led the way in terms of assessing groundwater conditions and ensuring sustainability.
It is recognised the Namoi is one of the most developed groundwater systems, it also has one of the largest monitoring networks, it also has some of the most proactive farmer bodies in terms of understanding risks, and managing water sustainably. We have engaged on Groundwater with our hydro closely since the development of the Water Sharing Plan, we implemented reporting structures to manage compliance, we provide ANNUALLY to our farmers the hydrographs for their zones and we regularly request status updates from the department. To date our groundwater model that was supposed to be updated in the first iteration of the WSP has not been updated, we are still waiting now 3 years overdue for a peer review of the groundwater model. We engage our own hydro to review the model and consider data requirements to ensure we can manage the resource without causing decline. The statements around groundwater in this section are uninformed and without context.

"We need to use groundwater more sustainably, innovatively and efficiently to provide a secure supply for towns and industries during dry periods and continue to support vital ecological processes and assets." In this case has the RWS team looked at the hydrographs around the town bores and considered where impacts occur? There is limited irrigation surrounding most town water supply bores, Namoi Water looked at the hydrographs during the drought and then matched this to the groundwater atlas to determine if extraction was impacting town water supply. It is not clear how the RWS team can make this statement given the detail of the data that would have been available to them. for this planning process.

Climate
Can the RWS re-run the climate data with the last 18months included, as it would change all the graphs presented to the community on storage volumes, rainfall and climate. Whilst using droughts to prepare for the next one is prudent, to suggest that this is the "new norm" is also inappropriate.
Given the climate records and predictions are highly variable, whilst the Stochastic is a new method it is not necessarily a silver bullet to preparation for variable climate which includes both wet and dry. The data shows that Split Rock is a white elephant, its expensive, it doesn't fill very often and the region would have been better off with an augmented Keepit.

“During times of low flows, extraction of water for harvestable rights may reduce the available water for the environment and other essential needs.”
Is the strategy suggesting that harvestable rights can be switched off and on? It is largely stock dams and fill by gravity without the capacity to prevent inflow.
The further we go into this submission the more irritating the 24% average annual inflows is – it is mind boggling that in a document that is primarily about drought management for town water supplies that this is even relevant in the context of planning. Over 90% of this connectivity is when it floods. Please look at how often the Namoi connects in low flows under natural compared to current development, how the water sharing plan compares to current conditions. The data suggests that the Namoi is delivering significant improvements in low flow connectivity as a result of headwater storage and regulation.
“However, some communities downstream of the Namoi region have been requesting additional measures to improve connectivity between water sources. This means that the Namoi Regional Water Strategy will need to consider connectivity…”

Connectivity is undefined, what is the level of water required for critical human needs in downstream communities? Where is this articulated and quantified for the Namoi RWS to even consider how it would contribute to this outcome?
Menindee Lakes is one of NSW most inefficient shallow storages, the evaporation rates are the highest in the state. The lakes are not natural they are artificial and the public works reports which one assumes the RWS team has take the time to access from the archives to determine the “natural” versus the “manmade” requirements.
The NSW Government appears to be confusing this issue given the Land and Water Commissioner report NSW River Data Project does not appear to have been taken into account. Cease to Flows pre and post 1950 have not significantly changed. What has changed is the releases from Menindee by the Commonwealth drawing down the lakes from full storage rapidly in 2016/2017.
https://www.industry.nsw.gov.au/ data/assets/pdf file/0008/163754/barwon-darling-menindee-lakes-and-lower-darling-data-package-july-2019.pdf
Floodplain Harvesting
“The total surface area of on-farm storages in the Namoi catchment is estimated to

be about 104 km2— nearly twice the area of Sydney Harbour (55 km2). These private on-farm storage structures capture rainfall runoff or store water extracted from the region's rivers and aquifers, including supplementary water from tributary flows. Water is stored in these private on-farm storages for use on irrigated crops. These storages help to buffer the variability in water availability in the region and periods of reduced supply. Most of these storages are located on the plains adjacent to the Namoi River."

Why do we use Sydney harbour here? Why don't you contextualise this and compare how much headwater storage the Namoi has to other valleys? Why don't you compare north to south in terms of headwater storage and then water charges? Why do we have on farm storages? Where is your reference to the EP & A act? Where the reference to the government river operator in the 1960's advising farmers they would have to store water on farm because it could not be delivered? Where is your reference to the Commonwealth funding of storages in the Namoi for efficiency that has created an additional 90 000 ml of farm storage? Is FPH significant in the Namoi in terms of other water sources and in terms of the volume of water available when FPH is stored or captured? There is no context here in terms of when large amounts of FPH is taken it is when there is a major flood and as a proportion of the event the department have already modelled this is less than 1% of the overall flow. This data was available to you because clearly you have a range of FPH data in terms of storage numbers this work was done by the department and should have been included in this report, but appears to have either been misused or cherry picked.

Groundwater

In terms of compaction the plan rules provide sufficient protection, they are overly conservative and to date the recent study of subsidence in the Lower Namoi has not detected any change.

The decline of 2m was accepted as part of the Water Sharing Plan is variable across the groundwater zones and has not occurred consistently, again this is a broad statement that can be misconstrued. Zone 12 is unique and is not as a result of groundwater abstraction and it is well known that this is a function of a range of issues relating to unregulated access, resource constraints and access in adjacent groundwater zones.

Water and the regional environment

"Very little riverine or floodplain land is under conservation.64" Namoi Water is not sure why conservation management is necessarily the answer here. If we manage our riparian areas in the manner in which the catchment action plan proposed with fencing of riparian zones, cell grazing and allowing grasses to stabilise the banks it demonstrates that conservation aims can be met.

Figure 23 GDE, Please note these are possible GDE systems given the lack of data informing this model the groundwater team provided clear commitment that this work would be referenced appropriately. It is not an indication of GDE, it is possible presence, this data has not been ground-truthed and nor has the reliance relationship been proven. Namoi Water strongly objects to this data being used contrary to the commitment provided by the researcher, by the Groundwater team and in the Namoi Groundwater sharing plan.

HEVAE is also not ground trothed – the tools being referenced in this report have been cobbled together using a "greenness" index from spatial mapping. Namoi

Water notes that the peer review of the EES method acknowledge the significant gaps in this method and it would only be used along riparian areas as that is the area that the CMA conducted square meter floristic studies using ecological some 10 years ago now. Please correct your report to reflect this uncertainty.
Page 85 the Namoi contributes a significant portion of flows in floods. Please correct this misrepresentation in the report. This is not a European river, this is not a snow melt system, the Namoi is an ephemeral River system that connects with rain fall. Please reference it as such.
“Diversions can impact on native fish populations, with a single water pump removing up to 800 native fish per megalitre of water extracted.73 There are 2,317 pumps ranging in diameter from 200 mm to 1250 mm are distributed across the Namoi and Peel River systems.”