The Murray–Darling Basin Authority consulted widely with communities as an integral part of the four year Northern Basin Review process.

The Northern Basin Advisory Committee (NBAC) was formed to ensure a wide range of views, from affected communities, Aboriginal people, industries and environmental groups, were heard during that process.

Some submissions alleging defects in the Northern Basin Review have been received from former members of NBAC as part of the consultation process for the Basin Plan amendments.

It is surprising and disappointing that after four years, and after the committee has been dissolved, that claims of this nature have been received by NBAC members including its Chairman, Mr Mal Peters.

Unfounded assertions about the research and science underpinning the Northern Basin Review recommendation and allegations that the review process was anything other than open and transparent are wholly rejected by the MDBA.

NBAC was provided access to all information as it became available – as were other interested stakeholders. Every effort was made to provide information about the hydrology modelling to NBAC's subcommittee, for example, the person who peer reviewed the work was available to answer questions.

The MDBA did not discuss or provide any undertaking to any stakeholder groups or individuals concerning the detail of the final Northern Basin Review recommendation before it was made public. The MDBA did consult with basin jurisdictions about the recommendation in line with the requirements of the Water Act as it informed a proposed amendment to the Basin Plan.

Correspondence between the MDBA and Namoi Water, released under FOI, shows that the MDBA was approached with a proposition from Namoi Water based on information they had received from a third party. The MDBA's response, prior to the start of the Basin Plan amendment process, was to acknowledge the proposition and offer to discuss it further if they wished. There was no abuse of process.

The MDBA's role is to develop the evidence base from which decisions about water recovery settings can confidently be made with regard to the triple bottom line – social, economic and environmental.

The multiple lines of evidence used to inform the decision indicate that by reducing water recovery as low as 320 GL we can achieve about the same level of environmental outcomes as we currently expect from the 390GL, while minimising economic impacts.

Further detail on claims in Mr Peters' submission are detailed below.

Claim	Response
Economic and hydrology reports are highly questionable	This is incorrect. All MDBA research and reports have been peer reviewed and found to be fit for purpose.
MDBA withheld or provided misleading	This is incorrect.

Claim	Response
information (compromising our independence)	MDBA released information as it was developed and quality assured – usually through a formal peer review process. NBAC was sometimes frustrated by the time this took.
The MDBA does not have a model run that represents the final SDL reduction	This is incorrect. The MDBA has completed a model scenario representing the Authority's final SDL recommendation. This model scenario was completed on November 8th 2016 following the Authority's consideration of all lines of evidence.
The Barwon Darling water sharing plan is not reflected	MDBA acknowledged in both the detailed and summary hydrological modelling reports that the version of model used for the Northern Basin Review does not fully represent 2012 water sharing arrangements. As stated in the detailed report, this was a result of the relatively late delivery of the 2012 Water Sharing Plan model. Note, NSW was still finalising the model that supported the 2012 WSP in 2016, in fact a final version of the model was received by the MDBA in April 2016. After the provision of the updated model, MDBA compared the flow results of both the old and new models. Site-specific flow indicator (SFI) results, which were used as the primary measure of environmental outcomes, showed small variations between both versions of the model. However, the Northern Basin Review focus was on understanding *relative* changes in hydrology under various scenarios, and it was concluded that the use of the updated models would not have had a material impact on the findings of the Northern Basin Review modelling. Furthermore, MDBA acknowledged (page 22 of the detailed Hydrological Modelling report) that rule changes in recent years may have reduced the protection of low flows, but that this reduction will not be reflected in the Northern Basin Review modelling results. This is one of the reasons that the MDBA has made the recommended recovery volume conditional upon the achievement of a set of toolkit measures, including enhanced environmental flow protection.
The MDBA would not provide the water sharing plan modelling results to NBAC	This is incorrect. The results for the water sharing plan model are listed in the Hydrological Modelling report on pages 15 and 16. Furthermore, modelling-interested members of NBAC were provided with a summary of the water sharing plan model (and associated scenarios) at a meeting in Sydney airport on Friday 23 September 2016. Mr Peters attended.
Inconsistent to accept the interim (Barwon Darling) plan but not the model run	MDBA has not made any statement regarding the acceptance (or non-acceptance) of the WSP model. The reason this model was not used for the Northern Basin Review was its relatively late arrival.
Standard error (is cumulative)	This is incorrect. The proponent has confused standard deviation with standard error. Furthermore, the proponent has linearly added a set of standard

Claim	Response
	deviations to provide a cumulative deviation, but this is not mathematically correct. The numbers quoted by the proponent are the standard deviation of diversions, which are a natural result of the variable climate in these catchments — diversions have a large range because the climate has such wide range between wet and dry years. Of more benefit would be the standard error, which provides an indication of the accuracy (or 'robustness') of the model. For this information, the proponent is referred to the report by Podger et al (2010), specifically Appendix B which demonstrates that the models reproduce observed volumes with a standard deviation of only a few percent. Independent reviews of the Basin Plan modelling framework (Podger et al 2010; Bewsher 2016) found that, although the models contain inherent uncertainties, the modelling platform is fit-for-purpose.
Social and economic net decrease in jobs in Warren due to Basin Plan a gross misrepresentation	This is incorrect. There is a significant employment decrease for Warren in the irrigated ag, total ag and the non-ag private sectors across all scenarios examined.
Biased to irrigators – only looked at sole socio-economic impact relating to irrigation and not the other uses of water	This is incorrect. The social and economic research undertaken by the MDBA was undertaken to provide an accurate picture of the impact of water recovery on employment in those towns more reliant on irrigation industries. It was supplemented by other economic analysis for floodplain grazing and socio-cultural research to quantify the importance of a healthy riverine environment to aboriginal communities. Non-consumptive benefits for non-irrigation dependent towns were inferred from hydrological results. It is a misrepresentation of the research to characterise the parameters of the research as 'biased'.
Toolkit: NSW say they won't do event by event environmental watering	This is incorrect. Governments are working together on appropriate measures that can be put in place to support event by event environmental watering. NSW has been clear all along that they support such actions as long as there are no third party impacts. The MDBA has made the Northern Basin Review recommendation contingent on state government support for toolkit measures such as this.
Coordinating flows is not feasible	This is incorrect. The coordination of environmental flows in the north will be challenging. However, with the development or improvement in system tools and predictive climatic information there will be greater ability to coordinate such events. Importantly analysis indicated that on average up to two

Claim	Response
	events a decade would require a level of coordination. Hence the development of systems tools to support coordination are not likely to be complex and will draw upon current river operation experiences. The MDBA has made the Northern Basin Review recommendation contingent on state government support for toolkit measures such as this.
Socio economic data changed by peak industry groups	This is incorrect. Industry groups were important partners in developing the research (and modelling capability) as they had information that was needed as an input. Along with local governments, local chambers of commerce and other businesses in the towns, peak industry bodies provided historic and current information about areas planted, employment numbers and other information that was then analysed and cross referenced with other research, like the census data, before the findings and method were peer reviewed and found to be fit for purpose. The social and economic working was updated on the role of industry input to help address problems encountered when building the social and economic modelling capability.
Inappropriate to rely on socio economic report for decision making	The social and economic report was one input into the MDBA's decision to recommend a change to the water recovery volume in the northern basin. It, along with reports into the Aboriginal values, a floodplain graziers report, environmental and hydrology reports were all considered in arriving at a decision.
Hydrology model available in July 2016 to industry	This is incorrect. In July 2016, the NIA was provided with a Powerpoint presentation of modelling results. The same information had previously been presented to NBAC. It is acknowledged that a range of reports were made available for comment to peak representative groups. These were the Environmental Water Requirement Reports and other supporting environmental science reports, however no hydrology report was available to be shared.
NBAC did not get hydrological modelling reports ever	The two versions of the hydrological modelling report (summary and detailed) were released to the general public upon completion (November 2016 and February 2017 respectively). NBAC was provided with a large number of presentations regarding this modelling work over a three year period. The modelling report is a synthesis of this information, with some additional analysis added during the final stages of report preparation. NBAC was dissolved in December 2016 when the Northern Basin Review was completed so was not provided with the February report – although it was available online.